MASSACHUSETTS PLOUGHMAN

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AGRICULTURAL.

After Effects of Underdraining.

The fear is often expressed by beginners in underdraining that the removal of so much water as the deep drains carry off will dry out the soil more than it should be, and thus make it as much too dry as before it had been too wet. But the fact is overlooked that it is only the surplus water which soil holds beyond the point of saturation that is carried off in the underdrain, and that the capacity of the soil for absorbing water is every year being increased so long as the underdrain keeps in working order. Where the drain is laid deep in the ground the absorptive capacity of the soil above it is in some cases so greatly increased that there are very few times in the course of a year when any water will reach the drain, and these times will be when there is no vegetation exhaling moisture, and requiring constant supplies to be drawn from the soil. With an underdrain four feet deep no summer rain can soak down to the tile. If the heaviest rainfall starts the drain to flowing it is conclusive proof that in some way an opening from the surface to the tile exists, through which the water flows in a stream, and that it has not been accomplished by water soaking down through the soil. That requires much more time every year the underdrain has been laid.

This is especially the fact where the land has often been seeded with clover. The deep roots of this plant, reaching into the subsoil and down to the depth of the underdrain, so increase its capacity of holding water that where land has been long seeded with clover it often happens that an entire year will pass without any outflow from the outlet of the drain. The soil is kept just moist enough to be expanded by freezing, and with each expansion its capacity to hold more water is increased. Even before the soil comes into this condition the clover roots do an important part of the underdraining, for they make the water courses by which the water on the surface is carried below the point where it will interfere with growing crops.

Whenever a wet place in the field is thoroughly drained the soil over the drain appears to have risen. Doubtless it is the fact that water no longer covers its surface that gives this appearance, though there is perhaps a real rise of an inch or possibly more through the expansion by freezing of pumped subsoil. As the growing of clover roots increases the vegetable material in the soil, that being derived from the atmosphere is a positive addition to the soil. On the other hand, when continued cultivation exhausts vegetable matter in the soil the surface is lowered, especially if the land is wet so that no very deep freezing is possible by which to expand and raise it.

Wet land that is to be seeded with grass or clover does not need so thorough underdraining as that which is to be kept under constant cultivation. Where clover grows its roots are all through the summer pumping water from the subsoil. This is done so effectively that after the heaviest rainfall on a field of full-grown clover the day after a rain will find the soil about as dry as it was before, even though the rain had been heavy enough to wet down to the depth of the furrow, if there be enough sunshine on the leaves of the clover to evaporate its moisture rapidly. On cultivated land, unless there were underdrains a rod apart, much of the land would be unfit for plowing for two or three days after such a rain as would not affect the plowing a single day where there was a good growth of clover. A sod of the grasses can always be plowed a week or ten days earlier than land that has lain naked through the winter.

Yet while thus plowable at all times the deeply underdrained soil cannot suffer from lack of moisture. Its absorptive capacity extends so deep into the subsoil that as the roots near the surface exhaust the moisture more water rises by capillary attraction, and as it comes to the warmer air outside the temperatures of each are equalized, forming dew on the surface of the ground, which is often seen on newly plowed surfaces that were dry the night before. The more deeply the soil is underdrained the greater the amount of dew that will be formed on its surface. This watering of soil by means of dew is often a very important means of saving crops from the effects of severe drought. The effect is increased by cultivating crops early in morning and late in the afternoon, in the one case to imprison the dew that has fallen during the night, and in the other to bring to the surface some soil that being cooler will condense more moisture from the air and thus increase the dewfall. We believe also that sowing of gypsum, which greatly increases the amount of dew is also helpful, as it increases the dew that can be plowed under before it has evaporated. Thus a well-drained deep soil receives a greater amount of fertilizing dews than the shallow soil that is quickly warmed through. It is the effect of underdraining in deepening soil that makes it tend to increase in fertility, although the ease with which it is cultivated makes it possible to grow larger crops from such soil, and thus exhaust fertility as fast as it is made. Yet that is the summing up of the farmers' work; making his land rich so that he can grow larger crops from it, and thus naile up the plant food with which he has filled it.

Barn Construction.

The Maine State Board of Agriculture in their bulletin for May send out their own ideas, or a few of them, upon the proper methods of building a barn for the hay and live stock of the farm, and follow their usual custom of supplementing them by letters from representative farmers in the various counties of the State. We are glad to present extracts from this bulletin to our readers, for we think there is great need of improvement in farm barns. Many have been contented with patterning their barns, after the style common a century ago, possibly enlarged and ornamented a little more. Others have employed architects to plan for them who had never spent an hour at work in a barn, and who invariably sacrificed convenience, and often also all sanitary conditions, in contriving grotesque architectural effects.

We think there is an excellent opening for some of the graduates of our Agricultural colleges to engage in the pursuit of architecture, with a view entirely to the planning of farm buildings, not only barns but others, so that they may be made not only pleasant to look at, but convenient to work in, and healthful for the cattle and other animals to live in. But we will let the Board of Agriculture and the farmers state their ideas. They say:

"The trinity of health-giving influences is comfortable quarters, pure air and sunlight. Any system of barn construction which accomplishes these results, unless too expensive, is to be commended. We would not build the large castle-like barn, if we were to begin new, but would rather build a barn for the storage of fodder, including always the silo. This barn should extend, if possible, east and west. Then from the middle of the south side we would extend an ell, wide enough for two rows of cows, standing with their heads together, with a feeding floor between. This ell can be made of sufficient length to accommodate the number of animals which it is desired to keep. It should be left open into the roof, and there need be no partitions between the animals and the feeding floor, as there being but one story to the building, there will be but little extra roof room to warm. There can be a basement for manure or not, as the owner may desire. If plans are made for the basement, let it be as much above ground as possible, and there should be ventilating shafts run from near the bottom to the point of the roof and out in the cupola or in some other way.

"With these conditions observed, and with plenty of absorbents, intelligently used, there need never be any fear of the apartments above becoming contaminated with foul air. In relation to the arrangements for tying, we would heartily recommend the modified Hoard stall, as first used in this State at the Maine Experiment Station. We have used these stalls for the past two years, and our cows are today as clean as though they had not been in a barn for the winter. Cows with white hips and flanks, which, in an ordinary tieup kept continually filthy, even with the greatest care, have been completely conquered, and now are standing without a stain, even on flank or side, and with switches perfectly free from all indications of dirt of any kind. With these stalls, the high platform is avoided, and the cow lies at ease on bedding held in place by the "heel piece," which also serves to protect her when lying down, as it helps sustain the hindquarters when the animal is heavy in calf. Each cow is fitted to a stall just to suit her size and habits, without changing the length of the floor or making the crib in front uneven. Care should be taken to have the floor even, flush with the forward side of the crib, so that grain and silage may be fed there, and so that there shall be no obstruction to prevent the cow from lying down well up in the forward part of the stall. In regard to barn cellars we may say that 15 correspondents advocate barn cellars, three think favorably of them if kept dry and light, two advocate them for manure only, one advocates cellar under part of barn, one would have part of cellar for manure and part for storage of farming tools, while four strongly disapprove of cellars for any use."

W. E. Leland of Androscoggin County seems to have given the subject some thought, as he is thinking of remodeling his barn. His plan differs from that offered by secretary McKeen, inasmuch as he would have cattle facing outward toward the windows instead of toward a central feeding floor. He says:

"I think I should have a barn in two parts, the main barn for the storage of hay, grain, etc., with wing running from the side wide enough for double tieup. Would have windows on both sides and end, and cows facing the windows. Would have water before the cows, and feed from car run on track from main barn; also would have cellar under whole barn, separated by partition. The portion under main barn should be used for storage of farm machinery. Would have stable for horses, with basement for hogs; carriage and harness room in stable, stable to connect with house."

Here is another from New Sweden: "My idea of a convenient barn and stable is to have it all connected, either in one frame, or a main barn with stable attached, so it won't be necessary to go out of doors to care for the stock, not even to water them. I would not have any feeding stuff, hay or straw, placed over the stable, as the gases from the stable injure them. Only straw used for bedding should be placed there. Have plenty of windows to admit sunlight, make it warm and free from draughts, but have it thoroughly ventilated. Have the part for the horses partitioned off from the cow stable, and if possible, have the small stock separate, too, if it does not necessitate carrying the feed long distances. If there is a good slope to the land, have a basement cellar for manure, but I hate to see these low, dark, damp basement stables, with horses, cows, calves, hogs, hens and sheep crowded together in a stifling, reeking hole, in many places with the spring water coming up in their stalls several weeks each year. If the land is too level for a manure cellar, then have a shed, and keep hogs on the manure all the time. Excavate the top loam to get a solid bottom, if you cannot afford a cement floor. Don't throw the manure out under the eaves.—V. T. Lundvall."

N. B. Young of Hancock County has lately built a new barn, and we like his plan so well that we give his description of it in full.

"We built a new barn a year ago, to cover all our farm animals and most of our crops under what is practically one roof. The main barn is 41x51, 20 feet posted, with a square roof, on top of which for ventilation is a cupola with slat blinds and shutters. The main part extends 50 feet from east to west, with doors in each end, which will admit of driving through the centre bay which is ten feet wide in the clear. On the south side of this floor is the cow tieup, of which I will write further on. On the north side is a ground mow, as it is commonly termed, which is 40x18 feet and gives a hoist for a hay fork when filling of about 30 feet from the bottom. At each end of this mow is an enclosed passage seven feet high and 5½ feet wide, which connects the main barn with a carriage house, stall room and also a hog house, which are under a shed built on the north side and extending around the west corner, giving a floor space 17x83 feet. In the east end of this is a large door which opens into a carriage room 17x45, which gives plenty of room for our carriages and harnesses, and also, in the rear end, for a grain closet. Still further on, and in the west end of the shed (which I should have said was built as high posted as we could have it) is the stall room for four horses, but it is separated from all other parts of the building by tight partitions, and is light, well ventilated, and can be kept free from draughts of cold air. The horses are fed from the loft overhead, which connects with mow in the main part, while the manure is thrown out into the part which extends around on the west side, and on which the hogs run at will. The entire shed is ceiled with matched pine overhead to keep all dust out of the lower rooms. The south side of our barn sits on the crest of a little hill, which slopes off and gives us a chance, by digging out the bank, to set a manure shed on this side and let the roof come below the bottoms of five large windows which supply sunshine for the cows. The tieup is 13 feet wide and will accommodate 12 cows. Under the cribs is an air chute, running the whole length and through the walls of the barn, giving the wind a chance to draw through. Out of this lead four perpendicular tubes to the top of barn, with holes cut in tieup to draw off foul air. This works all right and does not make it cold for cattle."

George N. Holland, member of the board from Penobscot County, says: "For the 'health of the animals' a building should be attached to the barn for a tieup, connection to the barn to be had by doors, through which the hay and grain should be taken to the stock, at all other times to be kept closed. The dressing should be put out of doors, never into a cellar under cattle, or under the hay and grain to be fed to them. It is strange that people will advocate and build barn cellars for a dumping place for all the foulest accumulations of the farm. They get the choicest stock, and are careful to secure the best fodder, and place both above the foulest stench, and expect the one to be healthful and the other to give good returns in cream."

O. T. Goodridge of Orono says: "I would have my barn large enough to accommodate all my stock, fodder, etc., under one roof, and all my buildings connected. It saves travel in caring for the stock. My storage rooms I would have as convenient as possible. Would have water in the tie-up if possible, either with aqueduct or a pump, so the stock need not go out in the cold to drink. Would have a yard, if I could, convenient to my door so I could turn the stock out for exercise on sunny days; yet I do not deem this absolutely necessary, as my stock has not been out of the barn from the time they came to the barn in the fall, until they were turned out in the spring, and I think they will compare favorably with any one's stock. I think much of the track carrier in the roof of the barn for unloading hay. Would not know how to get along without one now."

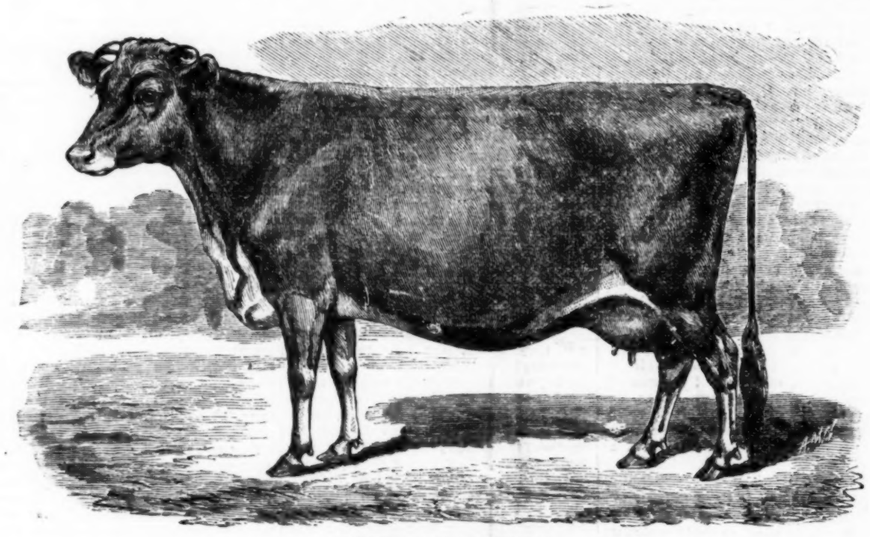
C. W. Brickett makes a good point in saying that "harnesses and carriages should be housed in a room by themselves, and thus avoid dust and ammonia, which injures leather and paint very much."

H. F. Weymouth of Somerset County tells how he made his barn durable for many years at but little extra cost.

"In 1876, I built me a barn, 42x100, at a cost of $1725. I will not say anything about the internal arrangements, but will speak of the roof. I had the ribs 16 inches from centre to centre. I did not board the roof. My shingles were spruce, sawed 5-8 of an inch thick at the butt and a sixteenth at the top, and fifty-four inches long. I laid them 16 inches to the weather, nailing to the ribs with a ten-penny finish nail. I prepared my shingles in this way. I took a potash kettle, such as is used in boiling potash, and filled two-thirds full of water and lime and began to boil it. Into this I put as many shingles as it would hold, butts down. It came up on them 26 or 28 inches. After boiling them 30 minutes, I took them out and put in another lot, and so continued until enough were boiled for the roof. Now the result: the shingles were green, and I boiled the sap out and the lime in. The shingles took in almost two casks of lime, and when cut in two, they were yellow all through. My roof is almost as white today as when laid, with no moss and apparently no wear. The snow does not stick to it, but slides off about as soon as it stops snowing. All who see it are surprised at the length of time it has been shingled. A word about my door sills. I have a door in each end of the barn and where I drive in and out my sills are stone. I split two stones, six feet long, 8x12 inches, for each door, and set my wood sills at the doors in twelve inches, and placed the stone ones in front, and doweled the centres, and they remain as they were placed 23 years ago, and have not rotted or worn out."

Several of the correspondents speak of the need of new barns to accommodate the increased amount of young stock being raised upon the farms, and some allude to the improvement which has been or might be made by keeping more stock, making more manure and taking better care of it under sheds or in barn cellars.

We confess to a liking for these symposiums of opinion from practical farmers, and hope we may be pardoned if in selecting from them we have been influenced at all in our choice by the fact that some agree with our own ideas better than do others. We do not endorse all the opinions we have quoted, but they are valuable "for a' that."



JERSEY COW, LEONORA.
Winner of Several First and Special Prizes at English Cattle Shows.

Farm Hints.

Farmers often do not realize how much water is removed from their land by a good system of tile draining. A writer in the National Stockman tells of examining a drain which received the drainage from a field of about nine acres. It had not rained for 48 hours, but the water was coming down at the rate of 40 gallons in four minutes, 10 gallons a minute, 450 barrels in 24 hours, 50 barrels from one acre every day and night. It would need but a few days of such drainage to make a wet field fit to drive over or to plow up, where before it would be unfit to put a team on at all perhaps for weeks.

Too many farmers are apt to look upon drainage as did one to whom we made the suggestion that he should drain a certain field. "What would it cost?" he wanted to know. We made as a rough estimate $75 to $100 per acre. "Spend $100 an acre on land that is not worth $10 an acre? Guess not. Don't see any policy in that," he said. And yet that field if well drained would easily have produced more hay, or more of almost any cultivated crop on one acre, than he was growing on any five acres of the best land that he was working.

We had no doubt that if it had been well undrained the increased value of the crops on it would have paid all the expense of draining in three or four years, and in some crops much more than that amount. There is one satisfaction, if he desires to drain it now he can do it at much less cost now than the figures we mentioned to him then.

Mr. Hobson of Guelph, Ontario, is an advocate of growing rape as a food for sheep, and he writes to the Journal of Agriculture that it has been grown extensively in the Guelph district for many years, and those farmers who grow it have made a great deal of money for years past by sending their lambs to the Buffalo market in prime condition, while it has helped to keep their farms in a good state of fertility. He advises farmers who have not tried it to put in a small lot to test it, and learn by experience the best methods of growing and using it.

He has grown it on poor sandy land, using about three-quarters of a pound of seed to the acre, and obtained some of the best crops ever grown on the farm. He top-dressed it when the plants were in broad leaf with 200 pounds of gypsum or land plaster to the acre. Usually applies about seven or eight loads of manure to the acre.

He sows in drills from 27 inches apart on light land to 30 inches apart on strong land, between June 20 and July 15, preferring last week in June if the land is in good condition and weather favorable. He likes to sow on raised drills, but many sow on flat surface, and does not want more than one or one and a quarter pounds of seed to the acre while the editor of the Journal prefers five or six pounds broadcast.

A good crop will carry 10 to 12 lambs to the acre for eight to 10 weeks, and there should be a growth of 20 to 30 pounds on each lamb in that time, and one grower has made lambs gain 50 pounds in 70 days on rape. He does not feed grain when on the rape field unless the field is overstocked, or he is desirous of hastening growth.

He has also found it a satisfactory fall feed for cattle, and pigs do well on it with a small allowance of grain. By using a scuffler between the drills as long as there is room to work it, the land is left very clean after the crop, and the crop is increased by such cultivation. He turns in when it is high enough to about cover the lambs' backs when feeding on it, and is a little careful with lambs and calves that they do not go to it at first in the morning with empty stomachs, or it may cause bloating. Also takes the same care if they are taken out and housed nights. Then he has them well fed in the morning before they go into the rape field.

Professor Craig of the Iowa Agricultural College says that by cutting rape four inches from the ground, and cultivating after cutting, it will sprout again very strong and he has by this method secured three good crops in a season, making about 36 tons of green fodder to the acre, which he used as a soiling crop for sheep and lambs.

J. S. Woodward of Lockport, N. Y., advises sowing the Dwarf Essex rape as early in the spring as the ground will work fine, and using 2½ to three pounds of seed to the acre in drills 20 inches apart. He says an acre of it on good land will furnish an abundance of green feed for from 25 to 50 spring pigs until they are fit for market, and after that eight or 10 lambs all the fall. Owing to its laxative quality stock should have an old pasture on which to run, or be given hay or other dry feed each day.

For the pigs, he would give them while on the rape all the coarse wheat mid dlings they would eat until they weighed 100 pounds each, then add one-third as much corn meal by weight to the middlings, and gradually increase until there was equal weight of middlings and corn meal, so as to have the pigs ready.

Hay and Forage.

Last year the demand for hay was so slack that many farmers neglected the hay fields last fall and even plowed some under for other crops; but the unusually good market which has prevailed for some time now has caused regret among those who too hastily did away with their hay crops. Nevertheless the crop promises to be moderately fair this year, and in view of the good demand for it unusual attention should be given to the process of cutting and curing it for market. It is true that the Government buys large quantities of second grade hay for its uses, and this factor has been one of the most important in the market this year, but the Government never pays the highest prices. Bidding for large quantities as it does, it secures the minimum prices for the quality of hay supplied.

This takes from the market large quantities of surplus hay, and gives other grades a better opportunity to find customers. It helps to make lower grades more valuable, but rarely affects the best quality. This latter sells itself, and in any season it will find customers when low grades are a drug in the market. Consequently it is the only kind of hay that the farmer can conscientiously strive to provide.

But prime hay must consist of first-class timothy, cured and kept in the best possible way. It must be free from mould, stain, odors or any other defects. If one has a fine timothy field it will pay to devote considerable time and labor to cutting and curing it. In the end all of the extra labor will be paid for.

But as there are many fields of grass that will not make prime timothy hay, it is a question sometimes what to do with it. If there are indications of a good market, it will pay to give as much attention to curing this hay as the best timothy, for the grades approximating prime timothy sell only for a few cents a hundredweight less. A good deal of the final valuation of this hay will depend upon the cutting, curing and packing for market. This more often determines the selling price of hay than the actual condition of the grass before cutting. But if the hay is indifferent and bad in the field it will pay best to use the land for something else. A run-down hay field is of little real value in these days of close competition.

W. E. FARMER.

New Hampshire.

Spraying Crops for Profit.

Prof. S. T. Maynard, pomologist to the Massachusetts State Board of Agriculture, sends out a bulletin in which he claims that most farm and garden crops can be protected from insects, blights and fungus diseases by spraying, and says that to spray whenever the conditions are favorable to the development of these pests is the only safe business principle for the farmer, the fruit grower or the gardener to follow.

The apple crop can be saved from injury by the canker worm, the codling moth, the tent caterpillar, the bud moth and other insect pests, by spraying with Paris green, while the apple scab, the cedar-apple fungus and other fungus pests may be destroyed by the use of the Bordeaux mixture. Both these applications can be combined and used at one time.

The pear tree psylla can be kept under control by the use of kerosene. Paris green will keep the fruit from becoming wormy, and Bordeaux mixture and copper sulphate solution will prevent leaf blight and the cracking of the fruit, as they also will the leaf blight, black knot and brown rot of fruit on the plum tree. The plums can be largely saved from injury by the curculio or plum weevil by the use of Paris green.

The peach is not as much benefited by spraying as some of the other fruits, but the use of Bordeaux mixture will do much to prevent the leaf curl, the shot-hole fungus, and the rotting of fruit on the tree. The arsenate of lead should be used on the peach instead of Paris green to keep off the curculio, and the peach aphis or louse may be destroyed either by kerosene emulsion, or a mixture of kerosene and water applied by a pump especially designed for mixing them.

These remedies are equally adapted to use for the cherry aphis, which causes the leaves of the cherry tree to curl and stop growth. The rotting of the fruit just as it begins to ripen may be prevented by spraying after every rain for a week or two when the fruit is ripening, with a copper sulphate solution, four ounces to 50 gallons of water. Paris green cannot be safely used on cherry tree foliage.

The leaf blight and rust on branches and fruit of the quince can be destroyed by spraying with Bordeaux mixture, but it should not be applied when the fruit is more than half grown.

Paris green destroys all the insects which attack the grape vine, and the black rot, the downy and powdery mildew, and the anthracnose or rust can be prevented from doing harm by the use of Bordeaux mixture and copper sulphate solution. Do not use Bordeaux mixture after the grapes are half grown. Spraying the vines every year regularly seems to give them more strength and give larger and better crops after a few years of treatment.

The Bordeaux mixture easily controls the orange rust and the leaf blight of the raspberry and blackberry, which are the two most serious obstacles to growing those fruits, and also the leaf blight which causes the leaves of the currant bush to fall off in August. Hellebore used as a spray, or put on in dust form when leaves are wet with dew or rain, kills the currant worm. The bushes need close attention after the leaves open, to apply it as soon as the worms appear.

The use of Bordeaux mixture as a spray much reduces the rust on the strawberry, and if Paris green is mixed with it, it prevents the black paris and the crown borer from doing as much damage as they might otherwise do.

Insecticides and fungicides are necessary if the best results are to be obtained in growing potatoes. Use either corrosive sublimate dip or sulphur upon the seed to prevent scab, and Bordeaux mixture with Paris green to kill the flea beetle and the Colorado beetle; at the same time the Bordeaux mixture largely or perhaps entirely prevents the vines from attack by potato rot, fungus and leaf blight.

The Bordeaux mixture used at the right time largely prevents leaf blight and rotting of tomatoes, and the fungous pests of the celery plant. On these it should be used in seed bed as well as in the field to insure success. Spraying with this or with copper sulphate solution will keep under control the onion rust, asparagus rust, grain rust and smut, as well as many of the insect pests on nearly all crops.

Every farmer and gardener should prepare himself with the materials for mixing these insecticides and fungicides, and apparatus for using them, and with spraying calendars and directions for mixing, which are sent out by experiment stations and published by most agricultural newspapers.

One may have the small hand pump for a small garden. The knapsack pump is adapted for use in shrubs, small trees and crops where the barrel pump cannot be easily taken. The barrel pump is needed for large trees and vines, and there are machine pumps for large orchards and vineyards. All pumps in which copper sulphate solution is used should be made of brass, as this soon corrodes iron.

Much depends upon the nozzle used. The Vermorel nozzle and the Bordeaux nozzle are both good, and throw a fine spray, but the small particles of lime or other substances must be strained out of the spraying liquid.

Paris green is the best known and most effective of the insecticides, and may be used at the rate of two pounds to 150 gallons of water. London purple is less reliable because more variable in its strength. The peach, Japanese plum and the cherry foliage may be injured by the use of Paris green, but the arsenate of lead is equally effective on them, and not injurious to the foliage, even when used in large quantities.

Kerosene emulsion, or kerosene and water applied in a fine spray or mist, are effectual against many insects, but never should be used in moist or cloudy weather. Select bright, airy days to use this.

Pyrethrum, known also as Persian or Dalmation powder, acts quickly upon delicate insects like the cabbage worm, currant worm, etc., and does best if applied just at night.

The solution of one pound of sulphate of copper in 25 gallons of water should be used as a fungicide only when trees are dormant. After leaves start, one-fourth of a pound in 50 gallons of water is enough. The spraying should be repeated after a heavy rain as it washes off quickly.

Transplanting Lettuce.

Even a small head of lettuce may be made to produce a good supply for the family, if, after it is pulled and the leaves are trimmed off for use, the root is carefully set out in a rich place and shaded until it has established itself. It is a surprise how rapidly the transplanted lettuce will grow. When it starts from the seed, which is very small, the lettuce grows very slowly, and it seems as if it never will get large enough to use. But in transplanting a great number of new roots put forth, and these make tender and succulent lettuce leaves, which are much better than those growing slowly. Often have we seen heads of lettuce that have been transplanted once or twice that will on a single plant produce enough for a small family, and most of this growth is made within two or three weeks from the previous cutting and transplanting. In fact, so successful is this method that we have known housewives to take up lettuce plants in the fall and try to grow them in tubs filled with rich soil in the house. But the conditions cannot be kept in most farmhouses like those of summer out of doors. In a greenhouse with bottom heat lettuce can be grown in winter as well as in summer. It needs less heat than most other hothouse plants, and can be grown farthest from the fire, but must always be well supplied with water.

Mr. Robert B. Sherrill, secretary and treasurer of the Northern New York Trotting and Pacing Circuit, informs us that all the stakes in the circuit have filled satisfactorily. Horses are to be named the first of July, when second payment is due, and Mr. Sherrill says that if there are any nominators who desire to sell their entries they can communicate with the secretaries of the different meetings.

AGRICULTURAL.

Government Crop Report.

Spring wheat acreage indicates a reduction of about 470,000, or 2.5 per cent. Of the twenty States reporting 10,000 acres or upward in spring wheat, six report an increase aggregating about 245,000 acres and fourteen a decrease amounting to about 715,000 acres. There is a reduction of seven per cent. in North Dakota, of five in Minnesota, eight in Iowa, three in Wisconsin, one in Nebraska, and six in Oregon. On the other hand, there is an increase of four per cent. in South Dakota and of six per cent. in Washington.

The average condition of spring wheat on June 1 was 91.4, as compared with 100.9 at the corresponding date last year, 89.6 on June 1, 1897, and 93.2, the mean of the June average for the last 15 years. The averages in the principal States are as follows: Minnesota 94, North Dakota 93, South Dakota 96, Wisconsin 95, Iowa 91, Nebraska 89, Washington 88, Oregon 81.

The average condition of winter wheat is 67.3 as compared with 90.8 at the corresponding date last year, 78.5 on June 1, 1897, and 83.4 the mean of the June average of the last fifteen years. The principal averages by States are as follows: Pennsylvania and Texas 77, Maryland 79, Virginia and Kentucky 72, Tennessee and Washington 76, Ohio 73, Michigan 45, Indiana and Kansas 53 Illinois 38, Missouri 60, Oregon 87, California 81 and Oklahoma 85. The acreage winter killed having been eliminated, the present averages relate strictly to the acreage still under cultivation.

The total reported acreage in oats is 7-10 of one per cent. less than last year. There is an increase of four per cent. in New York, of two per cent. in Pennsylvania, Ohio and Michigan, of five per cent. in Wisconsin and Kansas, of seven per cent in Nebraska and of three per cent. in North Dakota. On the other hand, there is a decrease of two per cent. in Indiana, Minnesota, South Dakota and Iowa of one per cent. in Illinois, 13 per cent. in Missouri and four per cent. in Texas. The average condition of oats is 88.7 as compared with 98 on June 1 of last year, 89 at the corresponding date in 1897, and 91.2 the mean of the June average of the last 15 years.

The principal State averages are as follows: New York and Illinois 96, Pennsylvania 87, Texas 73, Ohio 86, Michigan and North Dakota 94, Indiana and Nebraska 93, Wisconsin 95, Minnesota and Missouri 89, Iowa 90, Kansas 76, South Dakota 92.

The acreage reported as under barley is 3.1 per cent. greater than last year. There is an increase of one per cent. in Minnesota, four per cent. in North Dakota and 10 per cent. in California. As a partial offset, there is a decrease of two per cent. in New York, one per cent. in Wisconsin and three per cent. in Iowa and South Dakota. The average condition of barley is 91.4, as compared with 78.8 at the corresponding date last year, 87.4 on June 1, 1897, and 89.6 the mean of the June average of the last 15 years. The condition in the principal States is as follows: New York 99, Wisconsin 93, Minnesota 97, North Dakota and Iowa 95, South Dakota 88 and California 87.

The acreage under rye shows a decrease of 8.9 per cent. as compared with last year, the reduction in the principal States being as follows: New York one per cent., Pennsylvania five, Michigan 20, Illinois 16, Wisconsin nine, Minnesota 15, Iowa 23, Kansas 11 and Nebraska 12. The average condition of rye is 8.45, as compared with 97.1 on June 1 of last year, 89.9 at the corresponding date in 1897 and 91.3 the mean of the June average for the last 15 years. The condition in the principal States is as follows: New York 98, Pennsylvania 88, Michigan 81, Illinois 63, Wisconsin and Iowa 56, Kansas 66, Nebraska 75 and Minnesota 84.

Bees and Honey.

Those who work to obtain comb honey in the section box, and who have used the separator, or thin strip of wood between the rows of sections, to oblige the bees to build only straight comb, are many of them reporting that they like the fence separator sent out by the A. I. Root Company better than they do the plain separator they had previously used.

Where the 4¼x4¼-inch sections were used, the plain separator was about 17 inches long, 3¼ inches wide and 1-16th inch thick. The fence separator is of the same dimensions, but of three or four strips of thin board nailed to cross cleats on both sides, so that there are spaces of one-sixth of an inch between the boards, and with cross cleats of about the same thickness, one-sixth of an inch, the bees can pass easily through the separator, or up and down its sides, from one comb to another. They claim that the comb is more uniformly thick and capped full than it was with the plain separator, and the section frames may be of the same size at top and bottom as at the two sides, or 1⅞ inches wide and 4¼ inches long, as the fence furnishes room for the bees to pass around them. These sections are about right for one pound of honey, when well filled and capped.

There are other sizes of sections on the market, as the 5x4-inch, 1⅞ inches deep, 5x3⅞ cl⅛ inches and 5x3⅞x1⅛. These five-inch sections have what many would consider a fault. They will weigh full pounds if well filled, while the square 4¼-inch section is apt to be light weight, and as much comb honey is sold by count instead of weight, the beekeepers do not find fault if the section actually weighs 14 ounces instead of a pound. The sections five inches high by four inches wide not only are heavier than the square ones, but look larger, and we think would sell more readily and at a better price, probably enough higher price to pay well for any extra honey they may contain.

A California beekeeper writes to Gleanings that he made five tons of comb honey from 150 colonies in 1898, and to find a market for it he hauled it 300 miles, through the Mojave desert, to Los Angeles, carrying feed and water for teams and help. There was one wagon loaded with four tons of honey and two 50-gallon barrels of water, another with one ton of honey, 20 sacks of grain, one ton of flour as extra freight, blankets, etc., and two more 50-gallon water barrels, a third wagon with two tons of baled alfalfa hay and more grain. This train was drawn by 12 horses, and accompanied by five men. There was also a two-horse wagon with cooking outfit, one man, four women and four children.

They made the trip in four weeks, camping wherever night overtook them; carried the honey through all right and sold at 11 cents a pound spot cash. The trip home was made in a light rig in six and one-half days. This is a long trip to market, but we suppose it must have been a pleasant one most of the time, and one which would have been very enjoyable for young people.

We have heard of a method of starting in the bee business which cannot be called dishonest, even though it is getting something for nothing. A party living in a beekeeping section places in the trees near his house a number of boxes and kegs securely fastened, and in swarming time it is not unusual for him at night to find one or more of these appropriated as a hive by runaway swarms, which he proceeds to put into hives which he has ready for them. In this way he has in a few years got together quite a little apiary, without having purchased a bee, beside having on two or three occasions been called upon by the owner of the swarm to give up one which had been followed so closely that the owner thought he could justly claim it.

We do not know how he settled such claims, or whether if he gave up the bees he obtained anything for thus trapping them.

But we thought how often the beekeeper might do this same thing in his own orchard, and save himself the risk of losing a swarm, just because some errand called him away from home at the very time the bees chose to fly away. If they found a keg or a box in a tree near the hive would they not be as likely to accept that if it were clean and sweet as to seek out a hollow tree much farther away? We do not know that these trap hives need be baited, but we remember of hearing those who had experience years before we had any tell of rubbing the inside of a hive with fine salt or with some sweet herb before putting a swarm into it to make the bees better contented to remain. Others rely only on having it clean.

A correspondent of the National Stockman writes that he has raised bees and honey for 35 years, and has sent tons of it to market, mostly in barrels and tin buckets, but now he finds a better market for comb honey which is less work than to extract it. (We had thought the extraction required less work where one was properly equipped for it.) Last year the average of comb honey was 45 pounds per colony. As the season was short nearly all the surplus was stored in four weeks.

In the season of 1897 he had better success, as his colonies for comb honey averaged 90 pounds each. Out of three colonies which he extracted, the best one produced 342½ pounds, and had plenty to winter on. We would like to know how large a colony that was, or how large a hive it was in, and think it must have been above the usual size. He says that bees have wintered well there in Indiana this season, and as red and white clover came out in good condition, he expects a good honey harvest this year.

We hope he may find it so, but think that in many sections of the country there has been a heavy loss, and that possibly more have lived through the winter than will find honey enough to store much surplus this year.

Another writer tells of finding a swarm in August which he put in a hive with four old combs in it and the other frames filled with foundation. It made some brood and filled the four old combs with honey, and as he fed about eight pounds of sugar to it, he expects it to come through the winter all right. Beekeeping has changed since the time when "a swarm in July was not worth a fly," and we shall have more respect for late swarms hereafter.

Boston Fish Market.

There has not been a large supply of offshore fish this week, and while there are not many changes in prices today, unless the receipts tonight and tomorrow are heavy, the Friday sales are likely to be at rates above present quotations. Market cod is higher, at 1½ to 2 cents, and steak cod at 4 cents a pound. Haddock scarce at 2½ to 3 cents, pollock 2 to 2½ cents, hake and cusk 2 to 3 cents and flounders scarce at 3 cents. Halibut in fair supply at 10 cents for white and 8 to 9 cents for gray. Native mackerel higher at 15 cents each, and Spanish mackerel 10 to 12 cents a pound. Sea trout more abundant at 5 cents a pound, but lake trout firm at 10 to 12 cents, and brook trout steady at 40 to 60 cents. Striped bass, 8 to 9 cents for large and 10 to 12 cents for small. But few black bass at 10 to 12 cents. Scup in small demand at 6 cents a pound and perch 15 cents a string.

Shad are nearly done, but price as last week at 15 to 20 cents for jack and 30 to 35 cents for roe shad. Shad roes 20 cents each. No Oregon salmon coming now, and the approach of Bunker Hill day has caused Eastern to be marked up to 20 or 22 cents. Fresh tongues and cheeks 10 to 12 cents a pound and eels 12 cents. Frog's legs 40 cents a dozen and soft shell crabs 75 cents. Shrimps 40 cents a quart. Lobsters growing more scarce and now 16 cents a pound alive or 20 cents boiled. Clams steady at 50 cents a gallon or $3 a barrel. No change in price of oysters and but small demand.

Live Stock Notes.

Fattening lambs for market without docking them and castrating the males is a thing which no grower should do and few would do. It requires so little time and labor and is so slight a check in the growth of the lamb, that there is no excuse for failing to do it, while the advantages are many. In the first place few marketmen of experience will pay as much for entire lambs as for wethers. They do not often fatten as well, and if the ram is as heavy as the wether he has not so broad a back. There is not as much of the best cut, the loin, when cut up. The farmer will find the ram a heartier feeder than the wether or the ewe, and if kept until fall he will be restless, uneasy and quite possibly troublesome, even if kept apart from other sheep.

The docked lamb looks squarer across the

ENGLISH PRIZE LINCOLN LAMBS.

ham, and shows what he is, better than the one with a long tail, while he does not get so dirty if feeding on soft food or anything causing scours. We have known of long-tailed lambs getting so foul as to have maggots around the tail at such times, and they may cause death if neglected.

Perform the operations as soon as possible after the lambs are one week old, and certainly before they are three weeks old. Many perform both operations at the same time, and we see no great objection to doing so if lambs are strong, and the work is properly done. Others would dock at about a week old and castrate a week or ten days later. We think the two shocks are worse than one. We like to leave the tail about an inch long, and have never had to sear, and seldom to tie to check bleeding. We want a warm, dry day, and a warm, dry shed for the lambs to go in after the job has been done, and do it before noon that we may keep watch to see if the bleeding continues long.

The method of performing these operations are best learned by seeing an experienced shepherd do them, and we would not advise any one to attempt it without having seen it done, even though they read directions ever so carefully written. We want no other implements than a sharp knife, or chisel and block, and a strip of cotton cloth about an inch wide, or some coarse, soft twine, in case we desire to resort to tying. Return the lamb to its mother as soon as the job is done, and induce it to suck as soon as it will.

We find the following story in several of our exchanges, and republish it more as a curious item than as an example which we desire any of our readers to try to follow. We are thankful that we have not been obliged to pay for the corn this hog has eaten, and that we are not likely to have to eat the pork from him:

The largest hog ever raised was recently slaughtered in New York. The animal was a Jersey red boar, two and one-half years old, weighing alive 1609 pounds, and dressing 1336 pounds. The National Provisioner has the following to say of the prodigy: "This huge swine measured over nine feet from tip of its nose to end of its tail. It measured two and one-half feet across the ham and nine feet in girth. This makes the hog three feet through. It is split at the shoulder, and to look into the great carcass is like looking into the crevice of a cavern. The carcass spreads across the perspective of the store like a Titanic statue of Pork personified. It also looks like the body of the great hog god embalmed and reposing in its gigantic majesty. From hip bone to toe it measures three and one-half feet, and about the same from the crest of the shoulder blade to the bottom of the foot. The great fat jowls extend nearly two feet across. From between the ears to the tail is over seven feet. The tail itself is the smallest thing in the big proportions. It is a mere point in the air. The face of the hog is also small for the size of the animal. It is only 16 inches long. The hams are monsters in size, and the vast stretch of pork in the long waist is borne just above the ground by four comparatively small feet. The usual porker is a mere pigmy by its side. The biggest hog heretofore grown weighed 1250 pounds dead weight."

Small Piggeries Best.

Most of the attempts to grow a great many hogs have failed because it was so much more convenient to keep them in large herds that this method was generally adopted. The result was that when disease got among the herd, as sooner or later it was pretty sure to do, it made a clean sweep. If the same number of hogs had been kept in 10 to 20 herds there would have been opportunity to check the disease when it started, and the loss would have been comparatively little. There is another reason why in cold weather, at least, large numbers of pigs should not be compelled to sleep in the same pen. The pig's natural clothing of hair is thinner than that of any other domestic animal. In extremely cold nights hogs huddle together for warmth, and sometimes where large numbers sleep in one heap the bottom ones have their breath all squeezed out of them and are suffocated. Even if this does not occur, a sudden change in the pig's temperature from an atmosphere of 90° to 98° down to zero or below while eating is pretty sure to give the hogs bad cold, and it often never entirely recovers from this, the disease resulting in the formation of tubercles on the lungs, and if the animal is allowed to live long enough it will die from tubercular consumption.

The voracity of hogs in getting their food is a strong reason for keeping them in small herds, and those nearly of the same age and size, so that there shall be no weaklings to be crowded away from their feed by those older and stronger. Even the sow and her pigs cannot be profitably fed at the same trough, and it is a common expedient to feed the pigs in an adjoining yard with a creep hole in the dividing fence which the sow cannot pass. But where hundreds of hogs of all sizes and ages are kept in a herd the lot of the poorer ones is to be half starved unless a wasteful amount of food is given. If these hogs are divided into small herds, putting together those nearly of the same size, they will make much better gain from the food eaten.

It doubtless makes more labor to keep hogs in many small herds rather than in one large one. There is besides additional expense in making so many small piggeries, but the advantage of the policy of keeping hogs from being massed together are so great that we doubt not this plan will be adopted in the West, where the large herds that are there found have greatly increased the loss from disease. When cholera gets among a large herd allowed to roam the whole farm, the soil is so filled with germs of the disease that hogs cannot be safely kept on the place for several years thereafter. Such losses as this will convince Western farmers that the Eastern plan of keeping hogs in small herds is safest and most profitable.

Romance of the Turf.

"What a funny little horse, Tom!"

"Well, he is rather wobbly, but he's all right, just the same, and thoroughbred to the tip of his tail." And they laughed at the awkward little creature, but handled him gently and petted him more than would have been good for him if he hadn't been born with an angelic disposition. And he grew big and strong and beautiful, and one day they put the harness on him and he thought it was a new game invented for his amusement, and was willfully naughty, until they taught him how to play it scientifically, and then he liked it, and by and by, when the yellow-wheeled sulky was brought out, his big eyes would sparkle and his long neck arch itself like a bow, while his restless feet would fairly dance in his eagerness to get away and make that rubber-tired wheel look like a yellow streak down the long level stretch of road.

And when he came back to the big, comfortable stall, She was always waiting with his lump of sugar, and sometimes She hugged him and called him a beauty, and the Boy who waited on him rubbed his satiny coat until it shone, and only laughed when he threw himself into the straw and rolled over and got himself dirty, like the naughty baby he was. Oh, those were happy days—there wasn't a wish ungratified for him.

Then, one never-to-be-forgotten day, they swathed his legs in long bandages, fastened his blanket on him and She came and patted his silky neck. He was nervous and excited, and the Boy turned cartwheels and wiggled about in his clothes and said over and over: "Why, he's a dead-sure winner—he can't fail!" and both the others said stoutly: "Of course not!"

And then they took him to the cars, and that he didn't like. He wasn't afraid of them—not he—he wasn't afraid of anything—but he didn't like that noise, and the odor wasn't agreeable, and his stall was so little and cramped—but the Boy got in with him, and they talked it over together, and by and by—he didn't know how long they had been, but it seemed an eternity—they got out, and He was there to meet them and they went to a great big place, where there were a lot of men, and he was put in a stall, and allowed to roll about, and She came and brought his sugar, and he felt that it was all right, although he knew he wasn't home.

They had brought the yellow sulky, and he had two or three runs with it and saw lots of horses with swarms of men around them, and he wondered why they didn't pay any attention to him—he was used to so much of it that it rather astonished him. He didn't know that he was just an unknown yearling, who in the eyes of the racing world hadn't a ghost of a show to come in anywhere except at the tail of the string,—and if he had known, he wouldn't have understood or cared.

Then came the afternoon when She kissed him. My, what a time he had! The Boy had almost rubbed his coat off he had brushed him so, and the old sulky was brought around looking like new, and He came in a yellow silk cap and helped the Boy put the harness on and get him ready—and, by and by, he was on the big, level track, and came down before a great high building where surely all the people were packed, and they were looking at him and yelling like mad.

There were other horses driven by men in bright-colored silk caps and they got in his way—he wished they wouldn't, because he felt like going—he didn't want to stand still. Then they were lined up and a great quiet fell on the crowd—three, four times they got away, but were called back—then—they were off!

How those people yelled. He didn't like the dust those horses were flinging back at him. How strong he felt, and wasn't this sport? But there were all those horses in front of him—there was that black horse way on in the lead, and the sorrel filly who had acted so viciously at the start—he wasn't going to stand their dust—he'd get up there himself, and he stretched his long legs, and went as he had never gone in his life before,—but someway that black horse kept right there in front of him.

He didn't like it at all—his graceful body got nearer to the ground, the long legs seem to fly and the polished hoofs to spurn the earth. One by one they were passed, the filly hung by his side for some time, and then he left her, but the black still led. He crept closer—his head was just even with the black sulky. Down the track the crowd was standing and he could hear the hoarse roar of thousands of voices—and then for the first time in his life he heard the whistle of the lash and felt its sting upon his back!

What indignity was this—his proud heart was filled with rage—it must have been the brute driving the black. He would show him—and with one great burst of speed he passed the black and three clear lengths in the lead swept under the wire and passed that howling mob, while cries of "Kiamath! Kiamath!" made music in his soul. How proud he was, and how easy it had been for him. He could do it all over again, but they took him to his stall, and the Boy wrapped him up and acted like a lunatic. And He put his arms around his neck and locked at him—well—he was glad he had passed the black—and She came and kissed him right between the eyes, and gave him his sugar and cried on his neck—and his cup of happiness was full and running over!

He didn't know it, but that day he laid the foundation for their fortunes. They had been miserably poor when they got him in payment of that debt. They had felt that he would bring them luck, and today they had given him his chance and he hadn't failed them! They loved and petted him to his heart's content, but they also took him about on that Western circuit and he was successful,—so successful that the next year they took him all over the country, and he got so he didn't mind the cars or the crowds. The Boy always traveled with him, and in time he made them independent.

Last year while they were East, She died and He was heartbroken, so that in just one week He, too, went out over the long road, never to return, and only the Boy and and the Horse were left. The lawyers opened the papers, and then they found a curious thing. The Horse was heir to everything! The Boy was left $1500, and the Horse was to pay him his usual salary for taking care of him.

Everything the Horse made was to be invested for his own use. If he died, all the property went to a distant relation of the man's, so the Boy had a selfish motive for caring for the Horse, which was really unnecessary, as he loved him! On the 12th of June, when Denver's racing season opens at Overland Park, the name of the Horse will appear on the programme.

If you pay him a visit in his own paneled stall you will find the Boy in close attendance, and he will tell you that the horse's name is Kiamath, that his illustrous sire was Altamont, Oregon's blind idol; that he was once the pampered slave of Thomas Raymond and his wife, but now a free and independent member of the racing fraternity, owning himself, and rich in his own right!—Mail and Express.

Your Vacation.

It is time you decided where to spend it. Would you not like to spend it at far-famed Bar Harbor? You will not have a better opportunity than is afforded this year by the American Institute of Instruction, the oldest educational association in this country, which holds its 69th annual meeting in this noted resort, July 6 to 10. For this occasion greatly reduced rates are offered by both railroad and steamship companies, with privileges of making the journey partly by rail and partly by water. On the return trip stop-over privileges will be granted at or east of Newport Junction, Me. Return tickets are good until July 31.

An opportunity is here given of seeing the most beautiful and interesting stretch of sea coast in America. Numerous side trips, also at low rates, have been arranged,—by boat to Northeast and Southwest Harbors, Millbridge, Jonesport and Machiasport; by rail to Bangor, Eastport, St. John, Mt. Kineo and other places of interest.

The hotels have agreed to give special rates, while for those whose means are limited, or who wish the quiet and comfort of private homes, there is ample opportunity at a merely nominal price.

The meetings of the Institute are held morning and evening, leaving the afternoon free for sight seeing. The list of speakers includes Gov. Powers of Maine, Pres. Eliot of Harvard, Prof. Tyler of Amherst, Hon. Horace G. Wadlin, Chief of the Bureau of Statistics of Labor, Bishop Lawrence of Massachusetts and many others.

Music at all the sessions will be furnished by the famous Temple Quartette of Boston. Any person who wishes may share in this delightful summer outing. How it may be done is told in a 20-page bulletin, giving full particulars, which may be had by sending your address on a postal card to the Secretary, Edwin H. Whitehill, Bridgewater, Mass.

—Trafton makes the exports from the Atlantic coast last week to include 280,900 barrels of flour, 1 241,000 bushels of wheat, 2,823,000 bushels of corn, 4400 barrels of pork, 7,925,000 pounds of lard, 27,999 boxes of meats.

—The shipments of live stock and dressed beef last week included 3164 cattle, 2148 sheep, 13,955 quarters of beef from Boston, 1159 cattle, 1390 sheep, 12,162 quarters of beef from New York, 967 cattle, 1437 quarters of beef from Baltimore, 350 cattle from Newport News, 3495 cattle, 1093 sheep from Montreal, a total of 9095 cattle, 4631 sheep, 27,554 quarters of beef from all ports. Of these, 4549 cattle, 3193 sheep, 23,957 quarters of beef went to Liverpool, 2705 cattle, 163 sheep, 1629 quarters of beef to London, 567 cattle, 169 sheep to Bristol, 200 cattle to Hull, 1168 quarters of beef to Southampton, 585 cattle to Manchester and 91 cattle, 145 sheep to Bermuda and West Indies.

—The visible supply of grain in the United States and Canada, June 10, included 57,617 000 bushels of wheat, 13,266,000 bushels of corn, 8,133,000 bushels of oats, 891,000 bushels of rye, 1,364,000 bushels of barley. Compared with the week previous this shows an increase of 1,433,000 bushels of wheat and a decrease of 291,000 bushels of corn, 188,000 bushels of oats, 41,000 bushels of rye and 78,000 bushels of barley. One year ago the supply was 119,681,000 bushels of wheat, 21,362,000 bushels of corn, 7,113,000 bushels of oats, 1,178,000 bushels of rye and 497,000 bushels of barley.

—Mark Lane Express says that Belgium, Holland, Italy and parts of Austria-Hungary promise average wheat crops. In France, Germany, Spain and Holland crops are fair and there are hopes for a full average crop. In Russia the drought is too prevalent to allow a hopeful yield of either wheat or rye. In Roumania, Servia and Bulgaria a short wheat crop is regarded as inevitable.

—Statistician Brown of the New York Produce Exchange, formerly associated with Government agricultural department, estimates the winter wheat crop at 282,310.000 bushels, the spring wheat crop at 385,600,000 bushels.

—The exports from six principal countries last week showed 6,665,407 bushels of wheat and 5,581 889 bushels of corn. The United States supplied 3,153,047 bushels of wheat and 3 333 889 bushels of corn.

—Value of exports of general merchandise from the port of New York for the week ending June 13, $9 637 757, against $9,730,290 in the preceding week and $13,846,681 last year; since Jan. 1, $209,539,041, against $327,097,931 last year.

—The exports from the port of Boston for the week ending June 10, 1899, included 12,883 pounds butter, 70,627 pounds cheese and 113,100 pounds oleo. For the same week last year the exports included 27,974 pounds butter and 16 807 pounds cheese.

BRILLIANTS.

My mind to me a kingdom is;
Such perfect joy therein I finde
As farre exceeds all earthly blisse
That God and nature hath assignede
—Old Ballad.

My soul is an enchanted boat
Which like a sleeping swan doth float
Upon the silver waves of thy singing;
And thine doth like an angel sit
Beside the helm conducting it,
Whilst all the winds with melody are ringing.
—Shelley.

O opportunity, thy guilt is great!
'Tis thou that execut'st the traitor's treason;
Thou sett'st the wolf where he the lamb may get;
Whoever plots the sin, thou point'st the season;
'Tis thou that spurn'st at right, at law, at reason;
And in thy shady cell, where none may spy him,
Sits Sin, to seize the souls that wander by him.
—Shakspere.

O, rank is good, and gold is fair,
And high and low mate ill;
But love has never known a law
Beyond its own sweet will.
—Whittier.

POULTRY.

Practical Poultry Points.

A real estate dealer lately told us that he had no inquiry for farms this spring, excepting such as were thought to be adapted to the poultry business, but he was offering almost all sorts for that purpose, for he supposed chickens would grow and hens would lay eggs on almost any kind of a farm if they only received the right kind of care. He was not far from right, although we have no liking for a low-lying, moist soil for raising chickens.

We should fear that the poultry business would be overdone if we did not expect that more than half who begin it this year will have given it up within two years. Many of them will choose poultry farming because it has so little labor connected with it. Just to feed the fowl and to gather the eggs is their idea of the daily duties of a poultry keeper, and while one may manage poultry in that way for a day or a week, those who make that their regular system will find the duty growing lighter after a few weeks or months. There will be less fowl to feed and less number of eggs to carry in.

The man who desires healthy fowl and rapidly growing chickens, with an abundance of eggs will soon learn that there is much labor in keeping their houses clean, in getting a sufficient variety of food to stimulate egg production and promote growth, and if he attempts to wage a war against the insect pests of the hen on some place where hens have been neglected, he may find employment for all the time he can spare from his other duties.

And when to this he adds the care of flocks of young and growing chickens he may wish that the day had 48 hours instead of 24, that he might have twice as long in which to do his work, and twice as long in which to rest.

Some will begin the poultry business with too much capital, and start with more hens than they have experience to care for, and more expensive buildings than they need. Such ones will probably grow weary of seeing the outgo exceed the income, and then another "poultry farm with all the modern conveniences," and many inconveniences, will be for sale.

There is more hope for those who begin with an insufficient capital, for while they are increasing their flocks and their houses and yards for them they will be acquiring experience, and may attain to success if they have courage enough to hold on until they have capital enough to afford them a subsistence. The man who starts with 500 hens and but little experience may need an income from some other source to maintain his fowl. The one who can start with 100, though he understands the business, needs something more than the income from those hens to support his family.

There is much to be learned even in so simple a looking business as raising eggs and chickens. Liberal feeding is not all that is needed. Perhaps there is more loss each year from over feeding than from scanty feeding, and it requires some judgment to strike the happy medium between them, and know when to be liberal and when to hold back. No hard and fast rules for feeding of so much per head daily can be trusted as a guide, but vigilant watchfulness is needed by the most experienced.

The houses and yards for the fowl have no little to do in deciding the question of success or failure. It is not the best house or the most modern conveniences that always keeps the hen healthy and productive. Two things are absolutely necessary. Sufficient warmth and dryness. Light and ventilation are important, yet we have known hens to do well where there was but little of either, because they found both outside of the house during the day.

The care of the fowl is not as much a matter of experience and scientific knowledge as it is of constant attention to the smaller details. It is not necessary that one should know how to doctor sick fowl if he knows how to take such care of them that they will not be sick.

Another item of importance is the utilizing the omnivorous appetite of the hen to turn the wastes of the house and the farm into good food. There is scarcely a plant or a weed in the garden or a fruit in the orchard that she will not eat as readily as she would the grains that have been purchased for her, and she is not fastidious about animal food. She can take a bug or a fat grub as readily as the best of beefsteak, and she would eat army canned beef if the can was opened for her.

There are many advantages about the egg as a marketable product. It is sold in the original package. It does not need churning and working over like the milk or threshing like the grain. The production is not limited to a few days in summer like the strawberries and other small fruits, and there is no necessity of waiting for buyers to come after it. It is an every-day product for which there is always a cash market value and a buyer ready.

The chicken, too, has its share to do in promoting the profit of the poultry keeper. It is fit for market as a broiler when it weighs 1½ pounds if it is well fattened, and the old hen that hatched it out, and may have hatched out a dozen broods before, can also pass as a spring chicken in the fall.

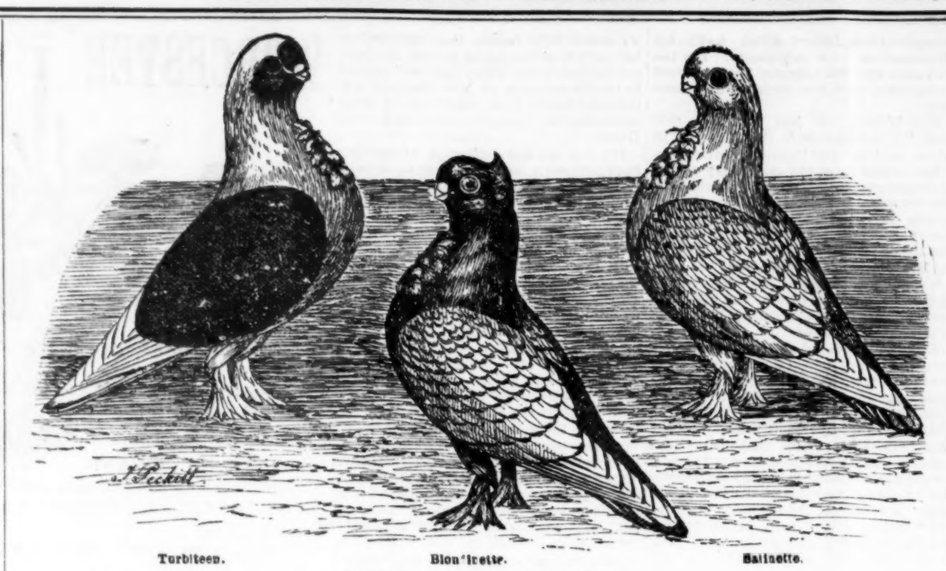
There is one thing in favor of the poultry business. With eggs and chickens the poultry keeper can find material for a good dinner any day, while the man with a herd of fat steers or a drove of fat hogs cannot take off a dinner and leave the rest until another day.

In no branch of farming is there a better margin for profit than in the poultry business, if all goes well. If a good hen costs a dollar, she can lay 12 dozen eggs in a year, and perhaps, with good luck, produce a dozen of chickens. In this part of the country the eggs would be worth $3, and the cost of feeding the hen would seldom exceed $1. The dozen chickens could be grown until worth $6, at a cost of about $2 more for food. Then there would be a profit of $5 in a year on the hen and her production.

It is thus easy to figure up a handsome profit in the poultry business, when one can obtain enough good hens and can take care of them and of the chickens, but there are buts. Overmuch prosperity is said to create enemies, but this is not necessary when one is growing chickens. There are enough at hand and ready to reach every vulnerable point. Rats, cats, minks, weasels, skunks foxes, hawks and owls all have a liking for the products of the poultry yard, and they are not at all particular how they obtain it. And there are always the small but numerous lice and mites, most formidable because of their number and the rate at which they multiply.

These last can be best fought by the use of the incubator and brooder for chickens, and by continual care to keep them off the roosts and nests. If one had 500 or even 100 hens to raise chickens from it would be much less work to use the incubator to bring out a dozen chickens from each hen than to try to patch them with hens. There are many patterns of incubators in the market, and one may have his choice of styles and prices. Having had experience only with one we will say that we think success depends more upon who cares for it than on who made it, as it does with a gun or a fiddle.

The same is true of breeds of hens. A man usually succeeds best with the one he likes best, because he will be more interested in it and take better care of it. This is one reason why we would always advise a beginner to start with a pure breed. He will take more pride in them than in a mongrel flock.



Turbiteen. Bion'lrette. Balinette.

ORIENTAL FRILLED PIGEONS.

Poultry and Game.

Some demand from the summer hotels is helping to make more trade in the poultry business, but it is not very lively, nor likely to be during hot weather. There is a little demand for fresh-killed broilers at 25 to 30 cents a pound, and larger roasting chickens go at 18 to 20 cents for choice and 12 to 15 cents for fair to good Western broilers, frozen, at 15 to 20 cents, and roasting sizes 15 to 17 cents Fresh-killed fowl 12 to 14 cents for choice with ordinary at 10 to 12 cents. Frozen fowls, Western, 11½ cents. Ducks continue scarce, and native are 17 to 18 cents. Western frozen, 12 to 14 cents, and geese at 10 to 12 cents. Frozen turkeys, 11 to 13 cents, and very dull. Live poultry at 20 cents for broilers, 10 to 11 cents for fowls, and 6 to 7 cents for roosters. Pigeons in fair supply at 90 cents to $1.15 a dozen, and squabs at $1.25 to $1 50 for mixed lots, with selected large at $1 75 to $2.25 Game unchanged, and not much in storage.

The Trade in Feathers.

"Of course," said a large importer of feathers and down to a New York Tribune Reporter, "most people know that feathers are not made; that they are simply gathered off the live birds for the market; but there are not many people who know that nearly the whole supply, which amounts to several million pounds a year in this country, comes here from China via Germany. In China the feathers are gathered by small dealers and commission merchants through the country, and the stock finds its way finally to Hong Kong, where the large packing and cleaning establishments are situated. Some feathers are made ready for the consumer there, but the largest part of the product is sent 'raw' to Europe, where the dusting and renovating take place. One of the largest plants in Europe is in Prague, where the factories of the concern which had the loss in Newark are located."

The duty on raw feathers is 15 per cent. and 50 per cent. on the manufactured or cleaned article, and in order to save a part of the extra 35 per cent. factories have been established here. The raw material comes to the United States in bales, which have been reduced in size by hydraulic pressure and contain about 400 pounds each.

Feathers which remain in Europe are used to a great extent for feather beds, but of the material which comes to this country the largest part is used for pillows and cushions.

"The ordinary pillow," said a manufacturer, "eats up 75 per cent. of the supply, and the rest goes to miscellaneous bedding, and the down which is selected from the feathers, and comes, in some instances, already selected, is used for fancy cushions of the better grade and for bed covers. Feather beds, the old-fashioned article, which come here from Germany and Ireland, are going out of date rapidly, and even the East Siders make pillows of their beds after they have been in the country a few years. New York is no place for feather beds, anyway, even if the people wanted them. In apartments like those in the old-fashioned New England homes a mountain of feathers may be housed, but in flats, which are so small that the occupants must use condensed milk, the feather bed can have no place."

HORTICULTURAL.

Domestic and Foreign Fruit.

There are only a few apples in the market, and with no receipts they are firm at $5 to $6 a barrel for Russets or Spys. Large receipts of strawberries, with some from Dighton and other nearby points, but the natives are said to be a very small crop. Good to fancy go at 9 to 12 cents a quart, and we saw some from Concord which were said to have cost 15 cents at first hands. North Carolina blueberries are in small supply, and not very large, but mostly in good condition, at 7 to 10 cents. A few choice large blackberries from North Carolina brought 12 to 14 cents readily, while fair to good sold at 6 to 10 cents. Some green gooseberries sold at 5 to 6 cents. Pineapples plenty, but in good demand, at $2.50 to $3 a case for 36s and 42s, and $3.50 to $4 for 30s to 24s. California cherries sell at $1 25 to $1 65 a case, 4 boxes; plums if in good condition at $2.25 to $2.75; prunes $2 75 to $3 50; peaches at $1.50 to $1.75 and apricots at $2 50 to $3. Some inferior lots or damaged sold lower, but good fruit is in fair demand at above rates.

Oranges are in better supply than last week, and a little lower. Best counts of navels, good to choice, at $4 25 to $5.25; some fancy at $5 50 to $5 75; seedlings and Mediterranean sweets, best counts, good, $4 to $4.50; choice to fancy at $4 50 to $5 25. Other counts are not plenty, but go at $3.50 to $4. St. Michaels, good to choice, $3 50 to $4 50, fancy, and extra fancy, $5.00 to $5.75. Late Valencias good to choice $4.25 to $5.25. Sorrento and Rodi 200 counts, choice to fancy at $5 to $5.50, 160 counts $4 75 to $5.25 Tangerines, half boxes, good to choice $1 50 to $2.25 Lemons are in good demand, fair to good at $3 to $3.50, choice to fancy at $4 to $4.50, some extra fancy go as high as $5 to $5 50. Three hundred and sixty counts average about 25 cents a box less on all grades.

Orchard and Garden.

An exchange gives this plan for growing the rhubarb or pie plant. Dig a trench 18 inches wide and two feet deep, and nearly fill with well-rotted manure. In this set medium-sized roots, and cover with soil enough to well bury roots and manure. Do not allow it to throw up a seed stalk to blossom more than once in four years, but that once seems to improve it, while blooming oftener causes decay. A bed set in this way 18 years ago, it declares to be in good condition and yielding well now.

We would add to this that the roots should be placed three to four feet apart in the trench, four feet being quite near enough if plants are to be kept in one position for 18 years or longer. And once in from two to four years if we wanted a crop for market we would plow each side of the trench as closely as possible, even if we broke a few roots in the fall after leaves have died down. Turn the furrow away from the roots and put a liberal allowance of manure along each furrow, then turn the earth back again, and in the spring, as soon as the roots begin to start, dig out all weeds and grass around each hill.

If we had either hogs or sheep that we desired to turn into an orchard, we think we would try to grow rape between the rows of trees. Not enough of it to prevent the animals from eating the fallen fruit, but enough to furnish them a part of their feed. The rape probably would not make as much growth as it would in more open field, but it would grow and help to keep down grass and weeds, while the animals would return more to the soil than the rape could take from it. While we have had no experience with it we have seen so many favorable reports of this crop that we think it well worth testing by the farmer, but we would not sow under the branches, partly because we should not expect it to grow well there, and partly because we should not want it in the way when picking up fruit.

We have found coal ashes of some value as a mulch around currant and gooseberry bushes, and doubt not that they would be around any of the bush fruits, and also quince and peach trees. They kill the grass, and thus do something to keep away the moth that deposits the egg of the borer, as they work worst where they can be sheltered from wind. They also serve to retain moisture beneath them, and they are so much of a non-conductor of heat that they prevent freezing and thawing so often in winter and early spring.

Naturally, they have more fertilizing value, by reason of the potash in them, if they contain some wood ashes, and the farmer whose wife lets her fire burn out and rekindles with wood every day or more frequently, during hot weather, will do well to save his ashes for this purpose at such times. Many of the stories of the fertilizing property of coal ashes are really due to the ashes of the wood burned at the same time, but in very heavy soil a mixture of coal ashes worked into it sometimes seems to make it more friable.

As regards pure wood ashes they may be safely used as a topdressing around almost any of the garden crops and small fruits, and especially upon onions, and among cucumber, squash or melon vines. A bushel to the square rod, or 160 bushels per acre of wood ashes is not an excessive dressing to put upon the garden and harrow in lightly before seed is planted or plants are set, and upon old soils long in cultivation it seems to have power to almost double many of the crops, beside improving them in quality.

There are many kinds of insects which certainly dislike to crawl over or through wood ashes, either when it is wet and the potash is a little caustic, or when it is dry and dusty. Snails, slugs and many of the larva are willing to keep away from it if possible, and thus a handful of it around a hill of growing plants will often keep them away. We never had too much wood ashes in cultivated land, though we have reason to believe that it may cause the growth of green moss in cold, wet meadows. We have been told so, and seen places where the moss grew thickly, caused, as it was said, by putting on wood ashes.

That species of blight on apple and pear trees, sometimes known as fire blight, is a fungous disease which attacks the outer ends of the limbs, the tender twigs and leaves, or quite often the blossoms, and spreads inward. Often it is unnoticed until the branches are badly affected, and this may occur in so brief a time after the first attack that it will seem as if it had all come in a single night.

In very warm weather in June and July, when trees are growing rapidly, these outer twigs and leaves are very tender, and if such weather is also accompanied, as it usually is, by frequent thunder showers, the conditions are just right to cause it to grow and spread rapidly. For this reason many have thought it was due only to the atmospheric conditions, and we have heard it called "thunder blight," as if they thought the electricity was the cause of it.

But it has been proven that it spreads from one tree to another, even under conditions less favorable to its rapid growth, and that a sound limb may be inoculated with it if the bark is cut with a knife with which a diseased limb has been cut. Probably it may also be transmitted by insects. Thus far no spraying has been found as a sure preventive of this disease, though some think that spraying with a solution of one pound of sulphate of copper in from 15 to 25 gallons of water helps to hold it in check.

When it is noticed, we should advise cutting all the diseased limbs at least a foot below where it can be seen. Remove those limbs from the orchard and burn them at once. After each cutting disinfect the knife with kerosene or some more powerful cleansing solution, if there is any, which we sometimes doubt. Follow up the cutting by spraying with the copper sulphate solution, not only on the limbs near the affected part, but on entire trees and those adjacent, but most especially the rapid-growing ones. This should be done as soon as the blight is noticed, as the longer it remains the more it seems to spread downward by the circulation of the sap in the wood, and thus it may destroy the entire tree, or one side of it, so as to spoil its symmetry. The disease seems to be dormant in winter, but starts anew in the spring.

Hay from Lodged Clover.

On very rich land clover often grows so large that its own weight brings it to the ground, and if this breaking down occurs while the air is still, the clover is usually twisted so badly that except with a mower and on smooth surface it is almost impossible to cut it. A good deal depends on the way the clover is cut, not merely for the present hay crop, but for the after growth. If cut close to the ground there will be a large amount of coarse stalks that are difficult to cure, though they may be when cured as sweet and nutritious as any of the hay. If not cut close, as must be the case when the mower runs the way that most of the clover leans, a long, coarse stubble is left from which the clover growth is very small, much as it would be if a mass of young buds were left to grow on a newly transplanted tree, instead of reducing the top to merely one bud, and allowing that to make all the growth it will.

Most farmers, for the good of the clover, try to cut as low as possible. Indeed, we have known some when the mower had left long stubble, follow it with a scythe and cut down what the mower knives passed over. Where the clover has been beaten down by rains most of it will fall one way. It is then possible by what is called "carrying the swath" to cut the whole against the fallen clover, and by letting the knives down close to the ground get the whole and make a closer cut than could be done by the most skilful mower with the scythe. In cutting clover no sod is left. The clover plants do not send out many small leaves at the base of their stems as all the grasses do. Consequently a clover stubble is harsh to bare feet, and as it exudes a gum it makes the shoes slippery in walking over it in them, as this gum quickly dries when it is exposed to the air, and it makes a smooth coating over the leather.

It is the gum which the thick clover stalks contain that makes clover hay ferment so quickly when piled in masses. Yet so long as it is not diluted with rains or dews this heating will usually dry out the clover without injury, so that it can be put in the barn without fear that it will there rot down into manure. After one heating in a small heap this clover has its moisture drawn out of it, and is really much less likely to heat injuriously than it was before.

New York Farm Notes.

In Lewis County the most beautiful June weather prevails, with warm, clear days and cool nights. Some of our farmers have recently been plowing and putting in corn and buckwheat. Corn is coming up very evenly and is growing nicely at present. A large acreage of fodder corn has been planted all about this section, as farmers were in doubt, early in the spring, as to a full crop of hay. The late frosts, in some portions of Lewis County, injured the grass more or less. Newly seeded meadows will doubtless be heavy, while meadows that have been mown two or three years are somewhat light. This county is now pretty well stocked with cattle, after a year or two of heavy hay crops, and hence a good hay crop is needed again this season.

Grain is looking very well, early sown having a fine start as the weather in April was exceedingly warm. Winter wheat never appeared more promising than at present. It is now headed out and stands heavy on the ground. It withstood the winter without being killed out. Potatoes are out of the ground and hoeing is progressing in this section during the dry weather.

The worms are making sad havoc with our forest trees, many of the maple sugar orchards being nearly devoid of leaves, while the tent worms are ruining the apple orchards where the trees are not strictly cared for. It seems a great pity and will be a severe loss to this section to have the small patches of timber destroyed by these pests. Most of the farms in this section carry small pieces of timber, thus furnishing wood and sugar for the families occupying them. This is the second season the caterpillars have been at work on the forests. Trees thus stripped of their leaves cannot survive for many years.

Cows are being picked up by our local buyers, for shipping to Eastern markets. They are selling at $30 to $40 per head. Pork, dressed, brings $5.50 per hundred pounds, for home consumption, at our local markets, if of light weight. Hogs on the foot, for shipping, sell for $3.50 per hundred, live weight. The prices for farm produce during the winter and spring have placed some money in the pockets of dairymen.

P. E. WHITE.

Denmark, Lewis Co., N. Y., June 12.

GEMS OF THOUGHT.

....If thou wouldst be happy, learn to please.—Prior.

....Ill deeds are doubled with an evil word.—Shakspere.

....In every parting there is an image of death.—George Eliot.

....Idleness is the only refuge of weak minds and the holiday of fools.—Lord Chesterfield.

....How bitter a thing it is to look into happiness through another man's eyes.—Shakspere.

....I had rather stand the shock of a basilisk than the fury of a merciless pen.—Sir T. Brown.

....If a little knowledge is dangerous, where is the man who has so much as to be out of danger?—Huxley.

....Ignorance is a blank sheet on which we may write; but error is a scribbled one on which we must first erase.—Colton.

....A saint is not free from sin, that is his burden; a saint is not free to sin, that is his blessing. Sin is in him, that is his lamentation; his soul is not in sin, that is his consolation.—William Secker.

....As love is the life of faith, so with the increase of love faith increases. Even from man toward man, faith and love grow together. The more we love, the more we understand and the more we trust one another.—Dr. Pusey.

....It is while you are patiently toiling at the little tasks of life that the meaning and shape of the great whole of life dawns upon you. It is while you are resisting little temptations that you are growing strong.—Phillips Brooks.

....It is not good that a man should batter day and night at the gate of heaven. Sometimes he can do nothing else, and then nothing else worth doing; but the very noise of the siege will sometimes drown the still small voice that calls from the open postern. There is a door wide to the jeweled wall not far from any one of us, even when he least can find it.—George MacDonald.

....O Thou, who art the only Good, in thee alone can our spirits find true rest and peace, in thy love is our highest joy. Preserve in our hearts that peace which passeth understanding. Grant us, in every sorrow or perplexity, the inward comfort of thy Holy Spirit. Unto thee we come for help. We make our prayer to thee, who knowest our inmost thoughts, and who alone can perfectly assist and comfort us. Do thou turn for us all sinful things into bitterness, and all things grievous and unwelcome into occasions for patience. In joy or in sorrow may we live as thy children; and, fostered by thy tenderness, may we ever grow in love to thee, and in devotion to thy holy will. Amen.

CURIOUS FACTS.

——The city of Pekin has only one street lamp, and that is in the street where foreign ambassadors reside.

——The oldest tree on earth with an authentic history is the great Shootree of Burmah. For twenty centuries it has been held sacred to Buddha, and no person is allowed to touch the trunk. When the leaves fall they are carried away as relics by pilgrims.

——Sand stored in a large tank, from which it can be sifted automatically to any or all parts of the building, in such a manner as to smother a fire effectively, is a new idea to be used in the new telephone company's exchange at Indianapolis, Ind. It is thought sand will be less injurious to the electrical apparatus than water or chemicals.

——It appears, from figures furnished by the Postoffice Department, that the average person in Massachusetts, including men, women and children, spends $2 30 on postage per annum. New York comes second, with an expenditure of $2 27, and the District of Columbia third, with $2.16. Colorado is fourth, with $1.93, and Connecticut is fifth, with $1 80. The States ranking lowest in this regard are South Carolina, with twenty-five cents per capita; Mississippi, with thirty-four cents; Alabama, with thirty-four cents; Arkansas, with thirty-seven cents, and North Carolina, with forty-one.

——A novel industry in the shape of a turtle farm is to be established at Glenolden, Delaware County, by two Philadelphians, who have calculated that there will be big money in raising snappers for market. A tract of ground, consisting of three and a half acres, has been rented on the Calcon Hook Road, and turtle ditches will be prepared for the abode of the turtles, each ditch being three feet wide and twelve feet deep. The ditches will range in length from 125 to 330 feet, and they will all connect with Thoroughfare Creek. The contract to dig the ditches has already been let. The farm will be well stocked with turtles, and the conductors of the enterprise figure that it will not be long before they will be supplying most of the snappers sold in the market to restaurants and caterers of this city.

Are You Going Anywhere?

This question, applied to the matter of summer vacation, is almost superfluous. Everybody, of course, is going somewhere this summer, if it is but a few miles away from the city, and only for a day or two. Some have decided just where they are going, but the great majority of prospective tourists are undergoing the mental tribulation of endeavoring to select from a multitude of untried places that which is probably the best suited to their taste and their leisure. Nearly all who read this will take their annual summer trip somewhere within the vast vacation region reached by the Boston & Maine Railroad system. To those among them who are included in the undecided class above referred to a pertinent suggestion is hereby given: Send two cents in stamps to the Passenger Department, Boston & Maine Railroad, Boston, Mass., for the 1899 issue of "Summer Resorts and Tours," and having, from a perusal of this, made a tentative decision as to which of the innumerable resorts therein described to go to, send another two cents in stamps for that particular illustrated book of the "Picturesque New England Series" devoted to the section wherein the selected resort lies, and the vacation is half begun.

"Summer Resorts and Tours" is an 80-page book in pocket form, containing a complete list of New England mountain, lake and seashore resorts reached by the Boston & Maine and its connections, together with a revised directory of hotels and boarding places, excursion routes and rates, steamer and stage connections, time tables of through trains, parlor and sleeping car rates and arrangements, up-to-date maps, and a variety of other information indispensable to the tourist. You can no afford to travel without a copy of this outing encyclopedia in your pocket.

MASSACHUSETTS PLOUGHMAN
NEW ENGLAND JOURNAL OF AGRICULTURE.
BOSTON, MASS., JUNE 24, 1899.

Patti is booked for another farewell appearance, but this time it's to be for sweet charity, and the queen will be patroness. With the Queen of England and the Queen of Song, the Charing Cross Hospital bazaar should be a great success.

Hon. Whitelaw Reid is frank and optimistic. He says that he was from the very first in favor of the acquisition of the Philippines, and so expressed himself when the commissioners met in the President's room previous to their departure from Paris. Mr. Reid insists, however, that the administration of this new territory should be based on ascertained fitness and not on political services. The gentleman knows whereof he speaks. We salute him.

We congratulate the rector of St. Paul's Church, Boston, upon receiving this week from Washington and Lee University of Lexington, Va., the degree of LL D. The same mark of distinction was also conferred on Col. G. F. R. Henderson, Professor of Military Art and History in the Staff College, England, and author of the life of "Stonewall Jackson," and President Harrison Randolph of the College of Charleston, S.C. Rev. Dr. Lindsay received some time ago the degree of D. D. from William and Mary College and the University of the South.

The old rule to delay the sowing of buckwheat until the 4th of July is hardly a safe one to follow in Northern States, where frost often nips this tenderest of all vegetables before its grain is perfected. There is, of course, danger from too early sowing of this grain, exposing it to the severe heats which sometimes prove as destructive as frosts, blasting the blossoms so that they do not set with grain. But if the buckwheat can be sown during the last days of June, there is little danger that it will be blasted by the heat, and the loss from untimely frosts, which is the evil that is most to be feared, will be avoided.

Our Army and Navy will have to come in on the double quick in order to keep up with the bishops of the Methodist church. At a missionary meeting held in Pennsylvania a few days ago Bishop McCabe expanded thus: "Oh, for one hour of Dewey in the Bosphorus! I long to see the day when Dewey will be before Constantinople, demanding religious liberty for the Turks with the bombardment of the Turkish capital as the alternative." Perhaps as a preliminary step to "seeing" this "glorious sight" Bishop McCabe would do well to petition in behalf of both Dewey and himself for the years of a Methusalah. Then he might invest in a telescope.

It is always the extra work required to produce the best that pays on the farm. In this, however, it is only the rule which holds good everywhere else. The world is full of slipshod, lazy workers,—men who really do not want to do any work, but who under compulsion do just as little as they can and still pass. Thousands of farmers object to certain crops, because to work on them is very disagreeable. What they want is the crop that is most easily grown. Such crops are always low in price, precisely because of this habit of human nature to seek the easiest jobs, forgetting that precisely because they are easy jobs, they are always overcrowded with applicants.

The old saying that "what is one man's meat is another man's poison" is curiously illustrated by some Kansas farmers in Sumner County, who are protesting against further bounties for wolf scalps. They find the wolf a great help in lessening the numbers of rabbits, which do them much greater injury than do the wolves. It is revolutionary to all Eastern ideas about wolves, to suppose that farmers anywhere can find them an advantage. But these Kansas farmers doubtless know what they are about, and if they protest against further destruction of wolves, their objection deserves to be considered, instead of being scouted as too absurd for respectful notice.

The French ministry has been retired by an adverse vote of the French deputies. But no one now fears that this will involve the downfall of the French republic, which is now more firmly established than ever. It may even be a hopeful sign for France that the late ministry, which was responsible for the injustice to the Jewish prisoner Dreyfus, is not allowed to remain in power while tardy justice is being done in this matter. France has an abundance of able statesmen, so that ministries may fall without doing any permanent injury. In this respect the French form of government is like the English, where ministry after ministry resigns, and the Queen accepts with equal readiness the conservative or liberal policy which the majority of people demand.

There is sure to be a great scarcity of hay in all Eastern States this year, owing to the dry weather since the middle of April. This will make the growing of supplementary fodder crops more important this year than ever. In many places drought continued so long that the grass roots were killed. In such cases immediate plowing up of the land is necessary so as to get it into shape for reseeding. A crop of millet or of hungarian grass can yet be grown, as these can be sown and make a crop up to the first of July, and even as late as the 10th of that month, if the seed bed is well prepared so as to insure quick germinating of the seed. If either of these crops are to be grown on sod land no time should be lost in plowing and rolling them so as to put the soil in as fine tilth as possible. By rolling land as soon as possible after plowing, the air spaces under the furrow are filled, and then lightly harrowing the surface the further evaporation of what moisture the soil contains is prevented. It is thus possible by early plowing to have land in excellent condition for seeding by July 1. Wherever there is any green vegetable matter it rots very quickly when turned under a furrow in hot weather.

All lovers of the trotting horse will sincerely regret to hear of the death of the Forbes Farm speedy trotter Nico (4) (2.08½), which occurred at Readville last Saturday night, and resulted from an attack of pneumonia. His record, 2.08½, made last season as a four year old, is the fastest yet gained by any New England bred light harness horse. He was a great credit alike to his sire, Arion (2.07½), to his breeder, J. Malcolm Forbes, and to his faithful trainer, Henry Titer, who developed his speed and drove him to his record.

Nico was a trotter in which all New England horsemen were interested, and of which every New England breeder of trotting was proud. Several good judges who had seen him at speed believed that he would place a faster heat to his credit this season than any other trotter out, and it is likely that had he lived he might have done so. A contest between Nico and The Abbot was looked forward to by many as the most important trotting event of the season.

The most successful of breeding establishments seem to suffer more largely in proportion in respect to losses than the ordinary ones. Fairlawn, Highlawn, Palo Alto and Maplehurst all had the misfortune to lose by death their most highly prized animals. Village Farm has lost several within the past few years, including Midnight Chimes, Prince Regent, the game mare Nightingale (2.08) and others. Forbes Farm is among the youngest of important trotting breeding establishments in New England, and it will not be many years before even a faster trotter than Nico will be produced there.

The prospects are very bright that the new Speedway will be completed by the first of September as the contract specifies. The foundation for nearly the whole length, a little more than a mile, is practically all ready for the top dressing of loam, and fully an eighth of a mile has already been loamed. When the Speedway is done it will be one of the finest, beyond question, in the land.

The Speedway is located on the Brighton marsh alongside the Charles River. Sometime before the work was begun on the roadbed the water was very thoroughly drained from the marsh, and a dyke erected along the bank of the river to keep back the tide water. This insures a constantly dry foundation. The sub-stratum of the Speedway is turf, and this, together with the fact of its being located on the marsh, insures elasticity to the roadbed. On top of this is about a foot of gravel and clay, and the top dressing consists of about three inches of loam. Altogether it looks as though it would afford fine footing for the flyers.

The Speedway is built on a graduated curve, but so gradual that it is imperceptible as one drives down it. If you stand at one end of it and look across to the other end there seems to be quite a bend in it, and if you were to draw a straight line from one end of the Speedway to the other the greatest distance from that straight line to the Speedway would be probably 500 or 600 feet.

The Speedway is 50 feet in width, and it has an excellent system of drainage. The outer side of it is elevated about a foot above the side next to the river, and on the very outer edge is a footpath nine feet wide. Next to the footpath is the boulevard, which it elevated some five or six feet above the Speedway.

The horses will be allowed to speed only one way, that is from south to north, and return on the boulevard. No speeding will be allowed on the boulevard, where teams can move in either direction. The boulevard is 60 feet in width. Posts marking the starting point, the eighth, the half, the three-quarter, the mile and the slowing up place will be erected along the side of the Speedway, and the Speedway itself will be fenced in on both sides. There are loops on either end of the Speedway to facilitate the start and the finish.

The rules and regulations for the government of the Speedway have been drafted, but not yet approved by the park commission.

Home Rule for Cities.

It is hardly too much to say that the principle of home rule for each locality is the basis of our form of government by and of and for the people. To only a limited extent, which is strictly defined in our Federal Constitution, is our National Government at Washington supreme. All powers not delegated to the general Government are by the terms of the Constitution itself reserved to the States and to the people, Article 10 of Amendments.

In the centralizing tendencies which were prevalent a generation ago, there was general acquiescence in assumptions of power by the States that were out of line with this provision of the Federal Constitution. It was assumed that it would be unsafe to allow the people of localities to manage their local affairs lest they should use them unwisely, as the States had done until restrained by XIIIth, XIVth, and XVth amendments to the Federal Constitution. That was the era when the latter clause of Article X of Amendments referring to powers "reserved to the people" was little thought of. Yet we believe as the evolution of mankind to a higher stage progresses, these powers reserved to the people will become every year increasingly important, until the time will come when no man will need restraint by law, because every man will have within himself all and more than the restraint which the law with penalties for crime can punish. There are now thousands and even millions of people who do not need laws to keep them from murder, from theft, or from robbing their fellow-men. Their conscience and sense of honor forbids such crimes as these more effectually than would the death penalty for murder, or the long imprisonment which would follow the commission of the other crimes we have named.

There is, then, only the problem of elevating all mankind to the level of the best citizens in any community that is needed to do away with all penal law, all courts and judges and prisons. There are localities in rural sections where there are no lockups, and where often no arrest for crime is made in a year. In the rare cases where some one violates the penal laws, he has to be taken to a nearby village or city for trial, where the courts of justice have been established, because there is enough crime going on within their jurisdiction to give them employment. It is not, however, because the people of the country are less inclined to do wrong than people in the cities, but rather because social restraints in small communities, where whatever a man or woman does is known to almost everybody, are more powerful than the restraint imposed by law, with its criminal courts, judges and other officers. Wherever the community is small these moral restraints work much more effectively than restraints by law can hope to do.

There is a dangerous and at the same time somewhat amusing misapprehension on this subject that is widely prevalent. Because the ratio of criminals to population is larger in cities than it is in the country, it is too hastily assumed that the people in the country are the natural conservators of the morals of cities. The truth is, that to a large extent large cities are the scapegoats for much of the wrongdoing which the people who reside in less populous places are responsible for. Men who are at home temperate and entirely respectable let themselves loose when they hide themselves in the crowd of a large city where nobody knows them. The worst of it is that such people, shocked by the wickedness which they have taken pains to discover, are henceforth among the most earnest advocates of State supervision of cities so as to lessen the immoralities there prevalent.

Many times it has been said that the proper government of large cities is the weak point in our system of popular government. As population more and more tends to large cities, this becomes a serious menace to popular institutions. Yet we believe the fear that cities must prove an exception to the rule that government by and of and for the people is best, is a fear that has no foundation, and that taken together the people of the cities are as competent to manage their own affairs as are the people of the least populous country township. If there is more of evil in the large city there are also found the highest development of those moral and civilizing agencies, the school, newspapers and the churches. As a matter of fact, it is very largely due to the money made in cities that these agencies are so widely found in country districts. Men born and bred in the country, who go to cities and become wealthy, are almost always found doing something to develop and improve the town where their early days were passed. The building of schools and churches and establishing free libraries are among the most usual means by which these benefactions come. It is true that to a great degree this gift to the old town is more properly the repayment of a debt to its people, dating back from the boyhood of the giver. But the fact illustrates that there is on both sides a reciprocity in giving and receiving which precludes the idea of absolute superiority on the part of either.

Yet in practice it is found that wherever country communities composed largely of farmers are in the same State with large cities, there is an almost irresistible tendency on the part of members from the country to undertake a State management of municipalities that they would instantly resent if any one should try to apply to their own townships. Yet if self government is good for one, why should it not also be good for the other? It was long ago said that the town meeting was the great school in which the ability of the people to manage their own affairs was taught. So much was this town meeting thought of in Boston, that it never applied for a city charter until nearly 80 years ago, long after the increase of population had made the town-meeting system wholly inadequate for representing the wishes of its people. Representative bodies to manage the local affairs of the municipality were then authorized by charter, as they have been in all the cities chartered since Boston became the first city in the Commonwealth in 1822, with Josiah Quincy as its first mayor. Since then there have been many cities chartered in this State. Yet in all, so soon as the town meeting was superseded by representative councils and boards of aldermen, State legislative tinkering, mostly for partisan advantage, has been the rule, though the pretext has always been that this State interference is in the interest of morality.

Most of the methods taken to coerce cities into being as moral as the country begin by taking from them some part of the management of their internal affairs. This always works injuriously. In just the proportion that the people of cities have home rule taken from them they will lose interest in the management of city affairs that they no longer control, and politics will fall into the hands of corrupt politicians. We must give more responsibility to the people. Then they will hold their representatives to full accountability for the powers entrusted to them. On the other hand, if power is taken from the people's representatives there is sure to be an increase of corruption that will point a new moral, showing the inability of large cities to govern themselves, though it is really the result of taking from city people all responsibility for managing their local affairs, just as is done by all rural localities in the State.

Exports to Porto Rico.

Since Porto Rico has become a part of the United States it becomes us to see what are to be the future prospects of our trade with the nearly million of people who inhabit this island. They grow no grain, and nearly all use wheat bread, and have paid a duty of $4 40 a barrel upon their flour. They have no forests, and must import their lumber. They produce neither cotton, hemp nor wool, and must purchase all the material for clothing, while most of their leather has been brought from France and Spain. They have cows, but make no butter, and hogs, which are not fattened to produce any lard. They import rice and codfish, candles and petroleum, potatoes, cabbages, onions, apples, oats, hay, beans and soap, as well as all their iron tools, agricultural implements, all machinery and furniture, and all crockery, hardware, glass, drugs and carpets.

They are very fond of apples and all the above list of American vegetables, and of butter, and if they have not been liberal purchasers of them, it has been because under the restrictive laws of Spain they have been obliged to sell their own products at low prices or work for low wages, while the duties which were placed upon all such imports made the price of them an exorbitant one.

What have they to offer us in return? They grow coffee, which has not been successfully grown in the United States; sugar, of which they have been and are likely to continue to be purchasers from some country; and tobacco of a different grade from that grown here, which has always been in demand by those who like, and can afford to buy, a good cigar. They have tropical fruits, as oranges, limes, lemons, bananas, cocoanuts, cocoa, etc., which have little or no place here, and vegetables which are ready for market at the periods of scarcity in our markets. Only with some parts of California and southern Florida do they come in competition. They grow neither grapes nor strawberries, and if they should, they would be ready at a season far in advance of ours.

With better and more liberal government and revenue laws, better highways and more steam or electric railroads, better employment and better education, we shall expect to see them more advanced in civilization, demanding better buildings, better furniture, better clothing, and asking us to supply their wants in these and many other respects, and as they are an industrious people upon a fertile soil, we feel that they will produce much to exchange with the people of the United States for both agricultural and manufactured products.

The Summer Boarder as a Social Factor.

In the course of the recent Atlantic Monthly papers on the "degeneration" (so called) of New England's hill towns, it was suggested that the reformation of the summer boarder would materially contribute to the permanent uplifting of such towns as may be marked by a decline of hope and ambition. It is not our present purpose to discuss on their merits the papers to which we have referred. Though written with undoubted earnestness and commendable sincerity of design, the general consensus of opinion seems to be that the papers in question exaggerated discouraging elements, and failed to appreciate properly those factors which make for righteousness in a community. Yet the statement that the summer boarder might be improved upon must certainly be granted true.

Miss Wilkins has just finished a new book, "The Jamesons in the Country," in which, with her own inimitable humor, she places in high light the missionary efforts of an energetic city-bred woman, who carries Browning and Emerson to those whose sewing bees have heretofore boasted no more disturbing element than hot biscuits and strong tea can contribute. We repudiate Mrs. Jameson's methods, but we hold none the less strongly that the summer boarder is a social factor, and that the times of "degenerate" country towns are in this boarder's hands.

The country folks of Joshua Whitcomb's generation and sweet ingenuousness believed that they were the social equals of those who in summer might come to be their "paying guests." This feeling was instinctive, and, like most such feelings, absolutely right. Since that happy day, however, many years have intervened, and the deplorable tendency to class differentiation has sprung up. Today, therefore "city folks" are several shades more artificial and "country folks" are a degree or two less simple-minded and whole-souled than in the time when Joshua Whitcomb and his "city boarder's father" were bred up in the same little red schoolhouse.

Now it cannot be denied that the sense of universal brotherhood has grown stronger instead of weaker during these past 30 years. It can then be only thoughtlessness which is to blame for the lessened intimacy between the farmer and his boarders.

The summer boarder does not so much need to be reformed it seems to us as to be reminded. All winter these young people who go to the country for rest have been laboring strenuously in schools, clubs, settlements and classes for all that makes for the ennoblement of the world. The Harvard men have worked in the Prospect Union, college girls have organized settlement classes, but no clear-cut and obvious channel for the dissemination of social purposes seems to these young people to be found in the country. Besides, is it not vacation time?

What the social student who is in earnest should remember is that there is no such thing as giving his brotherhood spirit a vacation. Let him then live his equality principles in the country as in the city, let him never forget to be in everything courteous, kind, considerate and helpful, for thus and thus only can he do his whole duty as a social factor, and bridge the little distance between town and country side.

Sectionalism.

Those who enjoyed the privilege of listening to the address of Maj.-Gen. Joseph Wheeler before Post 113 of Boston, on Memorial Day, or even those who have read it, cannot deny that it has the true ring of patriotism. It contrasts favorably with the utterances of those who have thought it a degradation that one who had been in arms against the United States should be allowed to participate in the exercises of that day, and pay his tribute to the memory of those who fought for the cause against which he waged war. Even among the many orators of the day there were few who were so fully able to divest themselves of all traces of sectional feeling and sectional pride, and to speak so eloquently for the union of the entire nation as being "one and indivisible."

To fully understand what such patriotism signifies we must refer back to the days before the civil war. One of the first lessons taught to the youth and young men of the Southern States has ever been that of loyalty to family and friends. They were to stand by "in evil repute as in good repute," and the ties of kindred and of friendship were the most binding that they could conceive. Next to that was held in esteem a loyalty to their native State. Not one among them would have failed to resent any imputation that any other State could produce braver men or fairer women than the State which gave him birth.

The Federal Union of the various States was looked upon as having been made when it was necessary that all should combine against the oppressive laws and enactments of the Mother Country, however much their interests should differ in other matters. It was an alliance which had been made necessary by their desire for freedom from British rule, but which it might become necessary to dissolve whenever their interests became so antagonistic that they could no longer "dwell together in unity."

We are not defending their views, but speaking of the facts as they were, and of the doctrines that had been instilled into the minds of the young men of that section.

That such feeling was not confined to the Southern States alone, but also prevailed to a certain extent in some of the older Northern States, we need offer no other proof than the fact that when the Southern States were passing their ordinances of secession, one of the most eloquent orators of Massachusetts said in a public address in Boston, "If they will go, let us do as did the Egyptians of old by the Israelites, give them jewels of silver and jewels of gold, that they may depart in peace." And this sentiment was applauded until Music Hall rang with the echo.

That was not patriotism, a devotion to the entire country, to the nation as a whole, which would thus cast off or gladly consent to the severance of a part of the States because they had upheld the institution of slavery, which we believed to be wrong before God and man. That was sectionalism, which would have gladly allowed to go to their own destruction in their own way those who would not conform to the New England ideas of right.

When the Southern States had passed their secession ordinances, yet showed no inclination to "depart in peace," but rather a determination to seize upon the property of the National Government within their borders, and even to take possession of the National Capital, there was "the uprising of a great people" to defend the power and the property of the Union, and to preserve it in its entirety as it had been handed down to us by our forefathers.

But it would be difficult today to tell, even for those who were most ready to enlist in the service, how much of their feeling was due to a patriotism which loved the whole country, and how much to a sectionalism which desired to show the Southern States that they could not either "rule or ruin" the entire country.

The hatred of the evil of slavery was scarcely stronger in New England than the hatred of the slaveholder and those who supported the institution. To have brought back into the Union those States which were trying to leave us would have lacked something of completeness to many if it could have been done without inflicting anything of punishment upon those who had hurled at us the epithets of "Yankee pedlers, greasy mechanics, and mudsills of society."

As we look back to those days, nearly 40 years ago, in the light of our feelings today, we cannot help feeling that sectionalism had quite as strong a hold in New England and in those States which had been peopled by the descendants of New England settlers as it had in those States which were most eager for separation from the Federal Union.

Too long has this feeling of antagonism been kept alive, and it has been more manifest in the older States than in those more lately settled. In the newer States the population has been more heterogeneous. The pushing descendant of the Pilgrim Fathers has been placed side by side with the roving son of the Southern States, and with both have been associated the newly arrived emigrants from the older nations of Europe. They have been compelled to unite each with the other, not only against savage tribes, who waged warfare upon the encroachments of civilization, but against all the forces of nature which resisted their efforts to make their homes in the wilderness. To many of them the State was not, until they had won the title to it and had created it. It was enough for them to feel that they were a part of the United States, and whatever of prosperity they might achieve added to the prosperity of the whole country, while they were dependent upon prosperity beyond their borders to enable them to prosper so that they could become integral parts of the Union, rather than wards under its protection.

When the citizens of Boston, than whom none have more of the pride of ancestral birth and of place, and the members of the Grand Army of the Republic, who are justly proud of the record of their achievements, can unite in welcoming here one who is a native of a Southern State, and who fought gallantly in support of the principles he had been taught in his youth, we can truly feel that something of the sectional feeling which once divided the North from the South, the free States from the slave States has passed away.

When he made haste to offer his services to the country he had once striven to disrupt, he had begun to show that he felt his allegiance was due to the whole United States and not to a single section thereof. His address upon Memorial Day indicated his respect for those who had conquered the Southern troops upon the battlefield, but it showed much more than that.

It showed that he had learned that the free institutions of the North were steps in the progress of the nation toward civilization and Christianity, for did he not say that "Wherever the influence of the American government has been felt the highest type of civilization has resulted. We must remember that our flag is the only standard on earth under which there exists the untrammelled right of man to worship God according to his own chosen forms and according to the dictates of his own conscience."

His presence here upon this anniversary before a body of the Grand Army of the Republic, and the welcome given him, proves more plainly than his words could tell that as we decorate the graves of those "who have served their country" it is good to cherish their memories, and from the graves of such will spring emotions common to us all, creating in our hearts a closer brotherhood and a purer and more abiding love of country.

The Farm Horse.

Besides raising horses for market, it might be wise for breeders to consider the right kind of horse to raise for the farmer. There are hundreds of thousands of horses used on the farms of this country, and this number must be renewed in part every year. The farmer is really the greatest factor in the horse market today, and a little consideration of his needs is necessary. In the past, old, worn-out, sore-footed car horses have gone to the farms, and because of their cheap price many farmers bought them. But there are no more car horses to pick up cheap, and farmers are looking for good, serviceable horses peculiarly adapted to their work.

Strength is not the sole requisite in a farm horse. The true farmer's horse is one equally serviceable in dragging the plow and trotting to market with a light wagon. The farm horse should thus be a cross between the draught and road horse. Courage, determination and quickness in taking hold of loads are very important qualities in this kind of horse. An animal weighing 1100 pounds with these good qualities will often be more serviceable than the team that weighs hundreds of pounds more. A quick, steady walker is very essential. Did you ever stop to compute how many days work you could save in plowing a field with a quick-walking horse? The animal that gets over the ground rapidly saves time and money to the owner. A slow walker is poorer for farm work than a slow trotter, and the time lost thereby is much greater.

Farm horses should have good lung power and good feet and legs, the latter, in spite of the old idea that sore-footed car horses would do for the farm. It is foolish to think that sore feet are not a very great disadvantage. The horse must have a soft, yielding purchase in the soil, and sore feet will reduce his pulling powers considerably. Inherited sore feet are worse than those acquired, for no amount of care will then cure them. The Morgan horses possess the qualities that are desirable for good farm teams, but there are others that answer the purpose very well. The farmer who attempts to raise colts for his use should be careful to select good breeding horses that will produce progeny of a desirable nature. Very often the farmer can raise his own horses better than some professional breeder, unless the latter gives special attention to the needs of the farmer.

Ohio. E. P. SMITH.

Gold Exports.

The fact that $7,500,000 in gold has been exported from this country to Europe within a few days need excite no fears in the mind of either financial circles, where the reason for it is generally well understood, or among the industrial classes, who are a little inclined to look upon it as a drain upon our resources.

It is but placing a part of the surplus capital of this country in a position where it will draw interest. The payment of the $20,000,000 indemnity to Spain was made without exhausting the debts owed in foreign countries to the United States. After that has been paid and this $7,500,000 more sent away, we still hold a much larger surplus of gold here than is usually kept as a reserve. Our large excess of exports over the amount we have imported has resulted in a corresponding increase in the wealth of the country.

We are no longer of necessity among the borrowing nations, as the larger part of our national debt is due to our own citizens, and we could easily take every dollar that is owed abroad. This is a contrast to the condition of some of the other nations.

Russia is a borrower to a large amount, and if that country continues her schemes of expansion, not only in acquiring ports upon the Pacific and building connecting railroads to them, but of building up cities along those roads, she must continue to borrow for years to come.

Japan has effected a loan of $50,000,000 in Europe, and Mexico is seeking to make one of $140,000,000. It is in part due to these operations that the nine principal or national banks of Europe find themselves holding $87,500,000 less of gold than they held one year ago. They needed this $7,500,000 and may need more, while here it must have lain idle until the crops begin to move, perhaps three months hence, and possibly may not be needed then, if our era of prosperity shall continue. If we do need it it can be drawn upon in London or Berlin as well as in New York.

None of the great industries of this country are suffering or likely to suffer from a lack of capital, while there has been grounds to fear that so much idle capital seeking investment might result in speculative movements, in which the poor might find themselves between contending interests, even as "between the upper and the lower millstone."

Practical Dairy Notes.

In traveling through a celebrated dairy region lately, I found more farms overstocked with cows than were understocked. This was one of the potent causes why dairying could not be made to more generally pay there.

The acreage of the farms was sufficient, but the secret was that the land was not in prime condition to properly support the number of cows maintained upon it.

When a dairyman proportions his pasture out by the acre to the use of his milch cattle, instead of figuring on the fertility of the soil, the result that I have outlined is apt to follow, he gets his farm overstocked. If a dairyman has taken pains to breed into good cattle, and still finds that his business does not pay as it should, he ought to consider the capacity of his farm.

Cut down the number of your cows and increase the productiveness of your soil, until you are sure that every cow you keep is getting all of the nutritious herbage she can digest. You can derive more milk from a good five-acre pasture than from an indifferent 10-acre one.

In starting into the season's dairying with a new hired hand or hands, you should train him or them in the routine of duties which you wish followed. To leave an inexperienced hired man to his own judgment, and then blame him for lack of judgment in carrying out his work, is a common folly perpetrated by dairymen.

Teach him early to follow your own plans so closely that the cows will never know the difference whether you or he has milked them, and the quality of the milk will bear as close an inspection at the factory when he has cared for it as when under your care.

It is only by having a hired hand so trained that he can be of true assistance to you by carrying out your exact wishes in the stable and field, that you can make his labor profitable to your ends.

If you are a home butter maker, remember that one point on which will hinge your success will be the matter of ripening cream. Do not let nature ripen it for you in her own way of variable thermometer and barometer.

You must be able to control and direct this ripening process yourself, so that cream need not sour any faster in hot weather than in cool.

There is only one way to keep foreign flavors from creeping into butter, providing the milk is originally all right, and that is to surround the milk and cream with absolutely sterile conditions and a temperature in summer of at least 60° if possible.

You cannot expect to make butter even passably good if you permit the cream to start to turn acid before it has been lifted from the milk.

To peel the sour cream with its specks of clinging casein off from loppered milk is so far beneath the dignity of good butter making, that it deserves only the notice of a passing condemnation. And yet, thousands of pounds of butter (?) will be made from such spoiled material the coming season!

Immature grass following a dry fodder diet scours the cows and produces a thin, watery quality of milk. At the same time cows will crop it closely into the roots, injuring the prospects of a vigorous growth of grass during the subsequent months.

One potent cause of pasturage failure in August is a too early turning of cows to grass in May. If possible, wait until the field can completely support them before putting cows out to pasture.

It is well always to see to your water supply, before cows are turned into the fields. The rapid melting of the snow often leaves watering troughs and springs choked with mud and debris, which befouls the drink for cattle. You cannot have perfect milk without pure sweet water for the milch cows. Milk from cows where the water supply is pure will not taint if properly cared for, and sours tardily. What is more, from healthy cattle it is absolutely wholesome.

GEORGE E. NEWELL.

Horatio Hathaway of New Bedford, Mass., has purchased from Hood Farm, Lowell, Mass., a valuable yearling Jersey bull that carries the blood of many of the greatest cows in that famous herd. His sire is Hood Farm Pogis, the bull shown at the head of the Hood Farm herd for the last two years, and his dam is Pedro's Fancy 21 of H. F., a beautiful young cow by Pedro's Signal Landseer.

MARKETS.

BOSTON LIVE STOCK MARKET.

Week ending June 21, 1899.

Amount of Stock at Market.

	Cattle.	Sheep.	Shotes and Suckers	Fat Hogs	Veals
This week	4061	4042	183	32,940	2156
Last week	4072	3864	110	29,916	2207

Values on Northern Cattle, etc.

Beef.—Per hundred pounds on total weight of hide, tallow and meat, extra, $6@6.75; first quality, $5 50@5 75; second quality, $5 00@5 25; third quality, $4 00@4 50; a few choice single pairs, $7.00@7.75; some of the poorest, bulls, etc., $3 00@3 50.

Cows and Young Calves.—Fair quality, $20@38; extra, $40@48; fancy milch cows, $50@65; farrow and dry, $12@25.

Stores.—Thin young cattle for farmers: yearlings, $10@20; two-year-olds, $14@30; three-year-olds, $22@40.

Sheep.—Per pound, live weight, 2½@3c; extra, 3¼@4¼c; sheep and lambs per head, in lots, $3.50@5.00; lambs, 5@6c.

Fat Hogs.—Per pound $3.75@4.25 ⅌ cwt, live weight; shotes, wholesale ...; retail, $1.50@4.50; country dressed hogs, 4¾@5c.

Veal Calves.—3½@4@6¼c ⅌ lb.

Hides.—Brighton, 7¾@8c ⅌ lb; country lots, 7@7½c.

Calf Skins.—65c@$1.00. Dairy skins, 40@50c.

Tallow.—Brighton, 3@3½c ⅌ lb; country lots, 1½c.

Wool Pelts.—75c@$1.00 each; country lots, 75c@$1.00.

Shearlings.—10@15c.

Arrivals at the Different Yards.

	Cattle.	Sheep.	Hogs.	Veals.	Horses.
Watertown	1696	3442	16,113	1226	355
Brighton	2366	600	16,827	930	120

	Cattle.	Sheep.
Maine. At Brighton.		
P A Berry	30	
Libby Bros	32	
Thompson & Hanson	15	
A W Stanley	10	
S Tracy	4	
M D Stockman	5	
M D Holt & Son	19	
A E Elkins	4	
Harris & Fellows	28	
H M Lowe	24	
New Hampshire. At Watertown.		
Shippers	35	60
Breck & Wood	19	
W F Wallace	69	44
Vermont. At Watertown.		
Carr & Williamson	19	
A A Pond	9	
Shippers	56	40
Fred Savage	12	
H N Jenne	7	
C W Cheney	14	
L E Merritt	8	52
Canada At Watertown.		
J A Hathaway	216	
J Gould	72	
A McIntosh	16	

	Cattle.	Sheep
H Laveck	38	
W Harris	100	
Massachusetts. At Watertown.		
J S Henry	21	2
W A Bardwell	8	42
O H Forbush	20	
At Brighton		
J S Henry	84	
Scattering	80	
H A Gilmore	11	
W Mills	9	
D Walker	11	
P F Litchfield	10	
H E Eames	8	
C D Lewis	7	
A M Baggs	10	
Western At Brighton.		
J White & Co.	200	
W H Monroe	17	400
Morris Beef Co.	935	
Swift & Co.	765	
S S Learned	120	
Sturtevant & Haley	118	
At Watertown.		
A McIntosh	88	
D McDonald	50	
W A Sherman	334	
Epstein & Co	100	
Shippers	3200	
G A Sawyer	62	
J A Hathaway	321	

Export Traffic.

The tone of the English market on State cattle is in fair position and values are fairly good, with sales at London at 11¼@12c, as sold shrinking the offal, and at Liverpool 11¼@12c. It is fair to suppose that these prices will be maintained during the week, as hindquarters of beef are quoted a shade higher. From Boston, for the week, 2952 cattle have sailed and no sheep sent over.

Shipments and destinations: On steamer Stella, for Bristol, 134 State and 111 Canada cattle by J. A. Hathaway; on steamer Lancastrian, for Liverpool, 759 cattle and 16 horses, the cattle by Swift & Co.; on steamer Irishman, for Liverpool, 643 cattle by Morris Beef Co.; on steamer Bostonian, for London, 334 cattle by W. A. Sherman, 100 by Epstein & Co.; on steamer Michigan, for Liverpool, 289 cattle by Morris Beef Co., 112 State and 104 Canada cattle by J. A. Hathaway, 72 by J. Gould; on steamer Pavonia, for Glasgow, 50 cattle by D. McDonald, 88 State and 16 Canada by A. McIntosh, 38 Canada by H. Lavack, 100 Canada by W. Harris.

Horse Business.

There is a perceptible difference in the amount of trade when compared with two weeks ago. The season is advancing, still there is a fair demand for good grade horses at firm prices. At Snow's Combination Sale Stable 4 carloads of Western, and just a fair trade with sales at $60@225, including light and heavy. At A. W. Davis's Northampton-street Sale Stable we report good sales, with prices for pairs at $1500 down to $250, and a demand for driving and coach horses. At L. H. Brockway's Sale Stable had 1 express and 3 freight carloads of Western. All were sold at $60@200. At Welch & Hall's Sale Stable had in 4 carloads, and closed out well. Good horses at fair prices. Cheap horses not selling to any extent and not wanted. Some fine pairs of trucks at $450 down to $375. At E. Ham & Co.'s Sale Stable a load of Ohio horses, of 1000@1850 lbs, at $125@250.

Union Yards, Watertown.

Tuesday, June 21, 1899.

A fair supply of beef cattle found their way to market. Such as came from the West vary in price; the heavy and best cattle rule stronger, while the slimmer sort are somewhat easier in price. The tone of the market for cattle has improved and disposals easier. W. F. Wallace sold 5 cows, of 4160 lbs, at $3.35 ⅌ cwt.; 1 bull of 900 lbs at 3¼c; 2 cows av 750 lbs at 2½c, 1 cow of 700 lbs at 3c. O. H. Forbush weighed 12 cattle, from 730@1370 lbs, the price to be made in Brighton. J. A. Hathaway sold 10 steers, av. 1550 lbs at 5½c; 10 of 1525 lbs at 5¼c; 10 of 1500 lbs at 5c; 15 of 1475 lbs, at 4⅞c; 30 of 1450 lbs at 4¾c.

Sheep Houses.

Butchers are buying only in a light way, and not a heavy supply of Western, as they rule too high from that section, and too much dressed mutton landed here to make an easy demand for live lambs. Market prices have not visibly changed, and not really much, if any, higher here than in Chicago. Spring lambs at 6½@7½c, yearlings 5@6c. Sheep, from 2½@4¾c. W. F. Wallace sold 9 lambs at 6c; 40, of 2370 lbs, at 7c.

Veal Calves.

The market is in better shape. A better demand for veal in the city, and butchers wanted calves this morning, but the general quality was not as good as usual. Anything up in quality cost 6@6¼c, and sales at 5¼@5½c; 69, of 10,370 lbs, at 6¼c; 100, of 13,970 lbs, at 5¾c.

Milch Cows.

A fair number unloaded that found their way to Brighton. The quality fully as good as last week, at a range of $20@60.

Fat Hogs.

Prices unchanged with Western at 3¾@4¼c, l. w. Country hogs, 4¾@5c, d. w.

Live Poultry.

Steady at 9@10c ⅌ lb.

Droves of Veal Calves.

Maine—P. A. Berry, 53; Libby Bros., 100; Thompson & Hanson, 90; A. W. Stanley, 19; S. Tracy, 7; M. D. Stockman, 16; M. D. Holt & Son, 60; A. E. Elkins, 3; Harris & Fellows, 140; H. M. Lowe, 125.

New Hampshire—Breck & Wood, 30; shippers, 175; W. F. Wallace, 119.

Vermont—Carr & Williamson, 84; A. A. Pond, 88; G. H. Spring & Co., 125; Fred Savage, 40; H. N. Jenne, 144; C. W. Cheney, 19; L. E. Merritt, 7.

Massachusetts—J. S. Henry, 131; W. A. Bardwell, 7; scattering, 200; H. A. Gilmore, 7; W. Mills, 12; H. E. Eames, 8; C. D. Lewis, 7.

Brighton, Tuesday and Wednesday.

Stock at yards: 2366 cattle, 600 sheep, 16,827 hogs, 930 calves, 120 horses. From West, 1955 cattle, 600 sheep, 16,800 hogs, 120 horses. Maine, 171 cattle, 613 calves. New Hampshire, none. Massachusetts, 240 cattle, 27 hogs, 317 calves.

109 cars of Western cattle were yarded here that would average 17 to a car; 14 cars of stock over the E. R. R., 8 cars from western Massachusetts. We found the market on beef cattle in better demand, and slightly better in prices on best qualities. For the next two months we anticipate a demand for good dressing steers. A. M. Baggs sold 10 oxen, av. 1600 lbs, at 4@4½c. Harris & Fellows sold 6 oxen, av. 1500 lbs, at 4¾c. H. A. Gilmore sold 9 cattle, of 840@1150 lbs, at 2¼@4c. W. Mills sold 4 cattle, of 3360 lbs, at 3c. H. E. Eames sold 8 cows, of 7440 lbs, at $3.60. P. A. Berry sold 2 cattle, of 3040 lbs, at 4⅝c.

Late Arrivals and Sales.

About as slim a cow market as one would ever expect to see. The buyers were very few and speculators could not invest to satisfaction. Cows off in price from $5@8 ⅌ head. Thompson & Hanson sold 8 cows at $32 and worth at the least $40 a head. M. D. Holt & Son sold 24 cows at $25 to near $50. W. F. Wallace sold 24 cows from $37.50@55. O. H. Forbush sold 2 cows, of 2250 lbs, at 3¼c, 1 fine cow, of 1030 lbs, at 3½c. J. S. Henry sold slow some at $50 and some at $25@40 Harris & Fellows 20 cows, $30@45. Libby Bros. sold 2 choice cows $55 each, 2 springers $37.50, 1 cow $38, 15 cows $30@35.

Store Pigs.

Trade quiet. Suckers, $1.50@2.25. Shotes, $3.50@4.50.

Milch Cows.

The market not as heavily supplied with milkers as last week, which may have a tendency to improve the market by another week, of which there is great need. Dealers of milch cows have hard pulling to effect disposals, and a shorten in of supply will be the only way to help the market. The call is largely for the better class of milkers at $40 and upwards. Libby Bros. sold 10 cows, at $30, $35 up to $55. Thompson sold some of his best cows at $45, $50, and 1 at $60. J. S. Henry sold 2 choice cows at $52 each, 4 cows from $40@45, 5 cows at $28@38.

Veal Calves.

A better feeling exists, butchers in better shape having sold out their veal close and wanted more. Prices a little stronger and trade quicker, but we hear of none selling at over 6¼c Quality in general rather inferior. Harris & Fellows sold 145 calves, 125 lbs, at 6c. S. Tracy sold 120-lb calves at 5½c, and various lots at 5@6c ⅌ lb.

Boston Produce Market.

Wholesale Prices.

Poultry.

Fresh Killed.

Northern and Eastern—	
Chickens, choice large, ⅌ lb	18@20
Chickens, winter broilers	25@30
Green Ducks	14@16
Chickens, common to good	10@15
Fowls, extra choice	13@
Fowls, common to good	10@12
Pigeons, tame ⅌ doz	75@1 00
Western dry packed—	
Turkeys, choice drawn	11@12
Turkeys, common to good	10@11
Chickens, choice	12@13
Chickens, broilers	23@28
Chickens, com. to good	10@11
Fowls, good to choice	11@
Old Cocks	7@
Frozen Chickens	10@13
Fowls	11@

Live Poultry.

Fowls ⅌ lb	11@
Roosters ⅌ lb	6@7
Spring Chickens ⅌ lb	18@23

Butter.

NOTE.—Assorted sizes quoted below include 20, 30, 50 lb. tubs only.

Creamery, extra—	
Vt. & N. H. assorted sizes	19@
Northern N. Y., assorted sizes	19@
Northern N. Y., large tubs	19@
Western, asst. spruce tubs	19@
Western, large ash tubs	19@
Creamery, northern firsts	17½@18½
Creamery, western firsts	17½@18½
Creamery, seconds	15@16
Creamery, eastern	16@18
Dairy, Vt. extra	17@
Dairy N. Y. extra	16@17
Dairy, N. Y. and Vt. firsts	15@
Dairy, N. Y. and Vt. seconds	14@
Dairy, N. Y. and Vt. low grades	13@
Dairy, western	13@15
West. imitation creamery, small tubs, extra	15@
West imitation cr'y, large tubs firsts	14½@
" imitation creamery seconds	13@14
" ladle firsts and extras	13½@14
" ladle seconds	13@
Boxes	
Extra northern creamery	19@19½
Extra western creamery	19@
Extra dairy	17@18
Common to good	13@15
Trunk butter in ½ or ¼ lb prints	
Extra northern creamery	19½@20
Extra northern dairy	17@18
Common to good	13@15
Extra western creamery	19@19½

Cheese.

Liverpool quot. white 42s.	
New York, small, extra ⅌ lb	8@8½
" " first ⅌ lb	7@7½
" " large extra ⅌ lb	7¾@8
Vermont, large extra, ⅌ lb	7¾@8
" small extra ⅌ lb	8@8½
" firsts ⅌ lb	7@7½
" seconds ⅌ lb	6@6½
Part skims ⅌ lb	@
Western twins, extra	8@8¼
Sage cheese, extra, ⅌ lb	8@8½

Eggs.

Nearby and Cape fancy ⅌ doz	18@
Eastern choice fresh	15@15½
Eastern fair to good	13½@14½
Vt. and N.H. choice fresh	15@15½
Western fair to good	13@14
Western selected, fresh	14½@
Southern, fresh gathered	13@

Potatoes

Aroostook Co. Hebrons	65@70
Aroostook Green Mountains	75@
York State, Green Mountains	60@
Western Green Mountains	60@

Sweet Potatoes.

N. Carolina ⅌ bbl. crate	2 00@2 25
Jersey, ⅌ bbl	@

Green Vegetables.

Beets, new, ⅌ bunch	2@
Beets native ⅌ bushel	@
Cabbage, new, ⅌ bbl. crate	2 25@2 50
Carrots ⅌ bu	1 00@
Lettuce, hothouse, ⅌ box	25@35
Onions, Bermuda, ⅌ crate	50@1 00
Onions, Egyptian, ⅌ bag	1 50@2 00
Parsley, ⅌ bu	2 00@2 25
Radishes, ⅌ doz	10@15
String beans—	
Common green southern ⅌ basket	1 00@1 25
Wax, per basket	1 00@1 25
Squash, Fla. marrow, ⅌ crate	1 75@
Squash, Hubbard, ⅌ ton	15 00@20 00
Spinach, native, ⅌ bu	30@35
Turnips, flat ⅌ 100 bunches	3 00@4 00
Turnips, yellow ⅌ bbl	1 25@1 50
Turnips, St. Andrews, ⅌ bbl	1 00@
Tomatoes, hothouse, ⅌ lb	20@25

Domestic Green Fruit.

Apples—	
Roxbury Russet, ⅌ bbl	5 00@6 00

Nuts.

Peanuts, Va., H. P. No. 1 ⅌ lb	4@
Peanuts, Va. No. 2 ⅌ lb	3@3¼

Tallow.

Rough, ⅌ lb	1½@2
Rendered	2½@3

Honey

York State—	
Clover, comb, fancy ⅌ lb	13@
Clover, comb, fair to good ⅌ lb	11@12

Hides and Pelts.

Steers and cows all weights	7@
Bulls	6@
Hides, south, light green salted	8@8½
" " dry flint	15@15½
" " salted	14@14½
" buff, in west	9⅝@9⅞
Calfskins, 5 to 12 lbs each	65@1 40
" overweights, each	1 50@
" south, flint dried ⅌ lb	11@12
" " salted ⅌ lb	9@10
Deacon and dairy skins	30@40
Shearlings each	10@15
Lambskins each, Brighton	75@1 00
Country	25@50
Country Pelts, each	50@70

Peas.

Choice Canadian ⅌ bu	1 05@
Common " "	90@1 00
Green peas, Western choice	1 05@
Green peas, Scotch	1 10@

Dried Apples.

Evaporated, fancy to extra fancy	10@10½
Evaporated, choice	9¼@
Evaporated, prime	8½@

Grass Seeds.

Timothy, ⅌ bu	1 40@1 85
Clover, ⅌ lb	6½@9
Red Top, western, ⅌ 50 lb sack	1 70@2 00
fancy recleaned, ⅌ lb	8@9

Beans.

Pea, N.Y. & Vt. small H. P	1 50@
Pea, marrow, choice, H. P	1 30@
Pea, screened	1 10@1 20
Pea, seconds	90@1 00
Mediums, choice hand picked	1 35@
Mediums, screened	1 10@1 20
Mediums, second	1 00@
Yellow eyes, extra	1 40@
Yellow eyes seconds	1 10@1 30
Red Kidney	1 70@1 80
Lima beans, dried ⅌ lb	4½@

Hay and Straw.

Hay, prime, large bales	16 00@16 50
" " small "	15 00@16 00
" No. 1, ⅌ ton	14 00@15 00
" " 2 "	12 00@14 00
" " 3 "	8 00@10 00
" fine choice	10 00@13 00
" rejected, per ton	6 00@ 7 00
" clover mixed, ⅌ ton	9 00@11 00
" clover, ⅌ ton	7 00@ 9 00
" swale, ⅌ ton	6 50@ 7 00
Straw prime rye	9 50@10 50
Straw, oat per ton	6 50@ 7 00
Straw tangled rye	7 50@ 8 00

Flour and Grain.

Flour.—The market quoted steady.
Spring patents, $4 10@4 75.
Spring, clear and straight, $3 20@3 75.
Winter patents, $4 10@4.60.
Winter, clear and straight, $3 50@4 25.

Corn Meal.—The market is quiet at 85@87c ⅌ bag, and $1 90@1 95 ⅌ bbl; granulated, $2 10@2 25 ⅌ bbl; bolted, $2 10@2 25.

Graham Flour.—Trade continues quiet, with the market quoted at $2 60@4 00 ⅌ bbl.

Oat Meal.—Quoted quiet, $3 60@3 85 ⅌ bbl for ground and rolled, and $4 00@4 25 for cut.

Rye Flour.—The market is quoted at $3 15@3 50 ⅌ bbl.

Corn.—Demand is quiet with market steady.
No 2 yellow, spot, 44¼c.
Steamer yellow, new, 42½c.
Steamer and No. 3 corn, 42c.

Oats.—Quiet but steady.
Clipped, fancy, spot, 36½c.
No. 2 clipped, white, 34½c.
No. 3 clipped, white, 34c.
Lower grades, spot, 34c.
Clipped, to ship, 36½c.
Clipped white, old, 33½@34c.

Millfeed.—The market is firm for all kinds.
Middlings, sacked, $15 50@17 50.
Bran, spring, $15 25.
Bran, winter, $16 00.
Red Dog, $18 10@18 50.
Mixed feed, $16 25@16 75.
Linseed meal, $24 00.
Cottonseed meal to ship, $21 50@22 00.

Malt.—The market is steady with trade ruling dull.
State grades, 6-rowed, 58@63c.
State, 2 rowed, 53@55c.
Western grades, 53@60c.

Barley—Quiet demand, with prices nominal at 50@75c for No. 2 6-rowed State, and 42@50c for No. 2 2-rowed State.

Rye.—Quiet at 70c.

The Wool Market.

Unwashed fleece, fine, Michigan	16@17
" " " Ohio	18@
" " ¼-blood "	21@22
" " ⅜ blood "	22@
" " ½-blood "	22@23
Fine delaine, Ohio	29@30
" " Michigan	28@
Washed fleece	27@30

YELLOW SPOTS ON CUCUMBERS.—"J. D. S.," Wakefield, Mass.: The yellow spots which appear on your cucumbers and make them unsalable are the effect of a mildew which has long troubled the growers of this vegetable. The gardeners on Long Island who supply the New York city markets with pickles found this mildew was ruining their crop, until they learned that a much diluted Bordeaux mixture was an entire preventive. The Bordeaux mixture also insures healthy cucumber leaves, preventing them from turning brown as some are apt to do without apparent cause. In this way it doubtless increases the cucumber yield, besides making the crop all salable. The leaf of the cucumber is very liable to injury, so that four times as much water should be used with this mixture as is allowable for spraying fruit trees.

YARDING COWS AT NIGHT.

The practice of bringing cows up at night is not a good one. It is far better to leave them in the pasture and milk them there, even though it makes more labor. In hot weather the cows if allowed their freedom, will graze during the evening and early morning while dew is in the grass, and will then lie down to digest what they have eaten. If yarding of cows is done at any time in summer it should be in the middle of the day.

TREES NEAR DWELLINGS.

A high tree a short distance from a dwelling house often acts as an efficient protector from lightning. The tree is full of sap and this makes a better conductor than the dry walls of a house. It is very rarely the case that live trees are hit by lightning strokes. The rending usually is of some dead portion of the tree that the electricity cannot readily pass through. Hence the high tree may have saved the house from being struck by lightning without leaving any mark by which the fact would be suspected.

TIME TO CUT TIMOTHY.

The pollen from timothy blossoms is very irritating to horses when it is cut in this stage. Hence the grass is left until the seed has formed, by which time the stalk becomes dry and of little feeding value. The very best timothy hay for horses is made when this grass begins to send up its seed stalk. But it has not the weight or substance that a later cutting will give. This is one reason why timothy hay needs so much grain to be fed with it to make it good feed for horses.

SCATTERED MANURE IN BARNYARDS.

After the bulk of barnyard manure has been removed, there is usually much scattering manure left that cannot be gathered while teams are hitched to the wagons ready to draw it to the fields. All of this should be scraped together in heaps, with the droppings of cows that may be yarded in the barnyard at night. These heaps will make, perhaps, two or three loads, worth twice as many dollars, if drawn out and spread in July on land that is intended for hoed crops next season

TEACHING COLTS TO EAT OATS.

Wherever it is necessary, as it often is, to work the mare while the colt is unweaned it is usual to shut up the colt in a box stall and without food or drink. This is unnecessary cruelty. If a little clover hay is placed where the colt can nibble at it, he will soon learn to eat hay, and if there is a box with a few oats in it he will learn to eat those also. This is the more important, because if the mare becomes heated while working, the milk may be injurious to the colt. The clover and oats cannot do him any harm. When a colt has learned to eat oats he can be weaned from the dam without any check to his growth. It is best in most cases that the liking for oats should be taught before the colt is weaned.

CULTIVATING YOUNG ORCHARDS.

It is almost universally agreed that it is best for young orchards, at least until they get to bearing age, to be kept in hoed crops as much as possible in order to encourage growth. Some have said that it is best to grow corn the first year, as this will afford a shade for the small trees that a potato crop will not. But the corn does not grow to a size necessary for it to afford much shade until the tree, if it lives, has become pretty well rooted in the soil. We have always grown potatoes as the first crop after planting young trees But whatever the hoed crop, a space around the tree of two to three hills each way should be left so that the whole surface can be cultivated, and there may be no temptation to sacrifice a newly planted tree in cultivating to save a hill of corn or potatoes. The tree barked or otherwise injured by the cultivator makes a loss that is far greater than that of any corn or potato hill that is saved while it is sacrificed.

LEARNING TO RUN AN ENGINE.

Whenever a steam engine is brought to the farm, if only for a few hours use in threshing or some other farm work, it is at once made the mark for much inquiry and for many curious eyes among the boys on the place. This curiosity ought to be encouraged instead of being repressed, as it too often is. Most of the work of the world is now done by steam, and as this tendency to substitute steam for human labor increases, the knowledge of the construction of a steam engine and how to operate becomes one of the most important branches of practical education that a young man can acquire. In every city there are thousands of men employed to run the stationary engines required for furnishing power or for heating. The men who know most about steam engines get these places. Such knowledge is therefore often a better resource for a man who is out of work than the best college education would be without knowledge of anything else than can be turned to practical use.

THE RED SORREL.

At this time of year many pastures and newly seeded meadows are red with sorrel now sending up its seed stalk. Where this weed abounds, especially if the field has been liberally seeded with clover, it means that the soil is deficient in either potash or lime, which clover must have and which sorrel can do well enough without. Because sorrel itself is sour, farmers often say the land it grows on is "sour" also. But sorrel is almost always most abundant on sandy land where there is no surplus of water to make it sour, but which is always deficient in lime or potash or both. The best way to keep out sorrel is to give the land a dressing of potash in available form and then sow ten quarts of clover seed per acre with a grain crop which has had 200 pounds of superphosphate drilled in with the seed. The clover if evenly sown will entirely smother the sorrel and kill it, though if there are any missed places these will be red with sorrel, showing that the weed tried to grow but was smothered out.

EARLY STRING BEANS.

One of the best paying crops for a farmer near a city or large village is beans, not to be grown for the grain, but to be sold as string beans in their season. All that is needed is to secure an early location and protect the beans from frost by small boxes over each hill, which are covered with paper at night. In this way, the beans are made ready for picking two or three weeks earlier than beans that have had no such protection. Almost every family will take a mess of string beans if the grower peddles them through the residential portions of the city, and at prices that are several times what the grower could make by growing beans for grain. The first supply of green string beans comes from the South, but so soon as the home-grown product comes in the market the Southern beans become unsalable. So, too, the price quickly goes down when the beans grown out of doors come in large supply from nearby growers. In such cases the beans are sold to groceries, and from them distributed to their customers.

New York Markets.

The drought is seriously affecting all the nearby crops of early vegetables, fruit and berries, and unless rain comes soon many will prove almost total failures. There are but light crops of strawberries on Long Island and in Jersey, and those sent in are small and of inferior quality, while those from Maryland and Delaware are not as good in quality or as abundant as a week ago. The cherries also are small and not as good as usual. Green peas have nearly all dried up, and only a few nearby are good enough to bring $1 50 a barrel. Those small and not well filled go at $1 to $1.25. Beans are reported suffering from drought, but Norfolk are plenty, with some coming from the South yet, and prices are probably lower than they will be when we have to depend upon nearby gardens. The same may be said of cucumbers, beets and carrots.

Potatoes and corn are reported as growing well yet, and if rain comes soon the farmers may have fair crops of them. Prime Southern new potatoes sell quickly at $2.75 to $3 a barrel, but a great many must go much lower, being either small or immature. If the Southern truck farmers would take more care in selecting produce for this market, they could have made more money this year than the gardeners near here are likely to make.

Boston Exports and Imports.

The exports from Boston for the week ending June 9 were valued at $2,097,331, and the imports at $1,573,732. Excess of exports $523,599. For the corresponding week last year the exports were $1,755,011, and the imports were $1,133,940. Excess of exports $621,071. Since Jan. 1 the exports have been $88,907,226, and the imports $57,816,605. Excess of exports, $31,090,621. For same 23 weeks last year the exports were $57,329,918, and the imports were $26,098,489. Excess of exports, $31,231,429. Of the exports for the week $1,800,663 went to England, $163,321 to Scotland, $5547 to Ireland, $34,830 to Nova Scotia and Provinces, $8832 to Newfoundland and Labrador, $52,310 to British possessions in Africa and $4555 to other British possessions a total of $2,076,058 to Great Britain and her colonies; $7023 went to Netherlands, $4807 to Belgium, $3785 to Germany, and smaller amounts to other countries. The principal articles of exports were provisions $793 778, breadstuffs $387,209, live animals $198,746, leather and manufactures of $130 982, wood and manufactures of $66,677, iron and manufactures of $17,066, cotton raw, $109,063, cotton manufactured $5716, paper $8269, agricultural implements $11,785, sewing machines $6190, other machinery $49,866, hardware $7186, petroleum, refined, $8520, tobacco $31,575, tallow $11,202, grease $4942, spirits $4155.

Butter Market.

While nominally the best marks of Northern and Western creamery are quoted at 19 cents, the same as last week, there have been some special mark in tubs sold at 19½ to 19¾ cents, and boxes and prints may have touched 20 cents in more than one instance. But as we anticipated last week those who are buying for cold storage and some who buy for immediate sales are not willing to go to 19 cents, and their call for a cheaper grade has sent up all creamery firsts and extra dairy a half-cent a pound, the firsts to 17½ to 18½ cents and choice marks of dairy to 17 and 18 cents. The lower grades are not much looked for, as export trade has fallen off considerably, and for some reason the demand for home consumption is less than usual. Receipts are lighter than last year at this time, not only in Boston and New York, but at Western markets, but a fairer comparison would be to compare them with a date two weeks earlier last year, for the season is that much later.

Receipts of butter for the week aggregated 38,748 tubs and 45,539 boxes, a total weight of 1,864,699 pounds, against 1,500,246 pounds the previous week and 1,807,835 pounds for corresponding week last year. This shows a slight gain over last year, the first for several weeks. For Monday and Tuesday of this week, there is a falling off.

The exports of butter from Boston for the week were 12,383 pounds, against 27,974 pounds corresponding week last year. From New York the exports for the week were 1367 tubs, and from Montreal the exports amounted to 6046 packages. Montreal is doing the bulk of the butter-export business, total shipments since the first of May being 21,480 packages, against 10,861 packages same time last year.

The statement of the Quincy Market Cold Storage Company for the week is as follows: Put in 17,337 tubs, taken out 273 tubs, stock 48,772 tubs, against 53,757 tubs same time last year. For the corresponding week last year, 11,098 tubs were put in. The Eastern Cold Storage Company reports a stock of 4498 tubs, and with this added, the total stock is 53,270 tubs.

Boston Vegetable Market.

There are not many changes in the prices, although they should be growing lower, and some are a little lower, having been grown when they have not suffered from the lack of rainfall. New beets and carrots of fair size sell at $4 to $5 per hundred bunches, old beets at 50 cents a box and carrots at $1. Flat turnips, Southern, at $1 a box, and a few natives at three to four cents a bunch, yellow turnips $1.25 to $1 50 a barrel. New onions are in at 20 cents a dozen bunches. Egyptian are steady at $2 to $2.25 a sack, and Bermuda at $1.35 a crate. Leek are 75 cents a dozen bunches, and chives from 75 cents to $1. Radishes 75 cents to $1 a box. Cucumbers higher at $4 per hundred. Southern peppers $2.50 to $3 a case. Summer squash $2 a barrel crate for Southern and $1 to $1.25 a dozen for native. Hubbards $1 a barrel. Watermelons $40 per hundred, and cantaloupes $2 to $2 50 a basket.

Cabbages are neither better nor cheaper than last week at $2 75 to $3 a barrel crate. Cauliflowers $1.25 to $1.50 a dozen, lettuce 25 to 35 cents a dozen, spinach 30 to 35 cents a box and beet greens 25 to 30 cents. Parsley $2 to $2.25 a box. Egg plants in small supply at $1.50 to $2 a case. Hothouse tomatoes 12½ to 15 cents a pound. No good Southern tomatoes offering now. String beans, green or wax, $1.25 a basket, and green peas have dropped to $1 or $1.25 a basket. Asparagus $2 to $2.75 a box. Rhubarb is higher at $1.25 to $1.50 a hundred pounds.

New potatoes coming freely, but many small and some in poor condition. Some Savannah Hebron and Rose sell at $3 75 to $4 a barrel, but more go from $2.50 to $3 50, mostly $3.25 to $3.50 for good; No. 2 sell slowly at $1.50 to $2, and good Red sorts are $2.50 to $3. There is a good supply of old potatoes, with moderate demand. Aroostook Hebrons sell at 65 to 70 cents, Dakota Red at 65 cents, and Green Mountains at 80 cents. Western Green Mountains are 50 to 60 cents, and York State Green Mountain and Rurals at 60 cents, with Burbanks and White Stars at 50 to 60 cents. Not much demand for sweet potatoes, but some North Carolinas sell at $2 to $2.25 a barrel crate.

Not only New England but all lovers of the trotter regret the death of the great gelding Nico (2.08¼).

Commonwealth of Massachusetts.

MIDDLESEX, ss.

At a Probate Court holden at Cambridge in and for said County of Middlesex, on the sixth day of June, in the year of our Lord one thousand eight hundred and ninety-nine.

On the petition of KITTIE A. WHEELER of Cambridge in said County, praying that her name may be changed to that of KATHERINE ADAMS WHEELER, public notice having been given according to the order of Court, that all persons might appear and show cause, if any they have, why the same should not be granted, and it appearing that the reason given therefor is sufficient, and consistent with the public interest, and being satisfactory to the Court, and no objection being made:

IT IS DECREED that her name be changed, as prayed for, to that of KATHERINE ADAMS WHEELER, which name she shall hereafter bear, and which shall be her legal name, and that she give public notice of said change, by publishing this decree once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, and make return to this Court under oath that such notice has been given.

CHARLES J. McINTIRE,
Judge of Probate Court.

Mortgagee's Sale of Real Estate.

By virtue of a power of sale contained in a certain mortgage deed given by William Washer to Albert L. Jewell, dated May 6, 1898, and recorded with Suffolk deeds, Libro 2526, Page 117, will be sold at public auction on the premises on TUESDAY, July 18th, 1899, at 9.30 o'clock in the forenoon, for a breach of the conditions of said mortgage, and for the purpose of foreclosing the same, all and singular the premises conveyed by said mortgage deed, and therein described substantially as follows:—

A certain parcel of land, with all the improvements thereon, situated in that part of Boston called Brighton, being lot numbered fifty-five (55) on a plan of land made by F. A. Foster, dated Jan. 1st, 1897, recorded with Suffolk Deeds. Book 2427, Page 597. Said lot is bounded and described as follows: Northerly by Elba street, so called on said plan, 76.47 feet easterly by lot numbered 56 on said plan 45 feet, southerly by lot numbered 54 on said plan 77.43 feet and westerly by Litchfield street, so called on said plan, 45 01 feet, containing 3463 square feet. Said premises will be sold subject to a mortgage of $3000 and interest, and any and all unpaid taxes and assessments. Two hundred dollars will be required to be paid in cash by the purchaser at the time and place of sale.

ALBERT L. JEWELL, Mortgagee,
209 Washington Street, Boston.

Boston, June 22, 1899.

Mortgagee's Sale of Real Estate.

By virtue of a power of sale contained in a certain mortgage deed given by William Washer to Albert L. Jewell, dated May 6, 1898, and recorded with Suffolk Registry of Deeds, Libro 2526, Page 107, will be sold on the premises on TUESDAY, July 18, 1899, at nine o'clock in the forenoon, for a breach in the conditions of said mortgage and for the purpose of foreclosing the same, all and singular the premises conveyed by said mortgage deed and therein described substantially as follows:—

A certain parcel of land with all the improvements thereon, situate in that part of Boston called Brighton, being lot numbered 52 on a plan of land made by F. A. Foster, dated Jan. 1, 1897, recorded with Suffolk. Deeds, Book 2425, Page 597. Said lot is bounded and described as follows: Northerly by lot numbered 53 on said plan 79.35 feet easterly by lot numbered 51 on said plan 45 feet, southerly by Dumas street so called on said plan 80.31 feet, and westerly by Litchfield street so called on said plan, 45 01 feet, contains 3592 square feet of land.

Said premises will be sold subject to a mortgage of $3000 and interest, and any and all unpaid taxes and assessments.

$200 will be required to be paid in cash by the purchaser at the time and place of sale.

ALBERT L. JEWELL, Mortgagee,
209 Washington Street, Boston.

Boston, June 22, 1899.

Commonwealth of Massachusetts.

MIDDLESEX, ss.

PROBATE COURT.

To the heirs-at-law, next of kin, creditors and all other persons interested in the estate of ELIZA E. MASON, late of Cambridge, in said County, deceased intestate.

WHEREAS, a petition has been presented to said Court to grant a letter of administration on the estate of said deceased to Edith E. Mason of Cambridge, in the said County, or to some other suitable person.

You are hereby cited to appear at a Probate Court to be held at Cambridge, in said County of Middlesex, on the eleventh day of July, A. D., 1899, at nine o clock in the forenoon, to show cause if any you have, why the same should not be granted.

And said petitioner is hereby directed to give public notice thereof, by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the last publication to be one day, at least, before said Court.

Witness, CHARLES J. McINTIRE Esquire, First Judge of said Court, this nineteenth day of June, in the year one thousand eight hundred and ninety-nine.

S. H. FOLSOM, Register.

Commonwealth of Massachusetts.

MIDDLESEX, ss.

PROBATE COURT.

To the heirs-at-law, next of kin, creditors and all other persons interested in the estate of JULIA CLARK, late of Concord in said County, deceased, intestate.

WHEREAS, a petition has been presented to said Court, to grant a letter of administration on the estate of said deceased to Harriet A. Warren of Concord, in the County of Middlesex, without giving a surety on her bond.

You are hereby cited to appear at a Probate Court, to be held at Cambridge, in said County of Middlesex, on the eleventh day of July, A. D. 1899, at nine o'clock in the forenoon, to show cause, if any you have, why the same should not be granted.

And the petitioner is hereby directed to give public notice thereof, by publishing this citation once in each week, for three successive weeks, in the MASSACHUSETTS PLOUGHMAN, a newspaper published in Boston, the last publication to be one day, at least, before said Court.

Witness, CHARLES J. McINTIRE, Esquire, First Judge of said Court, this sixteenth day of June, in the year one thousand eight hundred and ninety-nine.

S. H. FOLSOM, Register.

NOTICE IS HEREBY GIVEN that the subscriber has been duly appointed administrator of the estate of REUBEN GRIFFIN, late of Pelham in the State of New Hampshire, deceased, intestate, and has taken upon himself that trust by giving bond, as the law directs. All persons having demands upon the estate of said deceased are required to exhibit the same; and all persons indebted to said estate are called upon to make payment to

REUBEN E. GRIFFIN, Administrator.
(Address) Haverhill, Mass

OUR HOMES.

June Brides and Girl Graduates.

June, in all its characteristic beauty and freshness and fragrance, is with us again, and in her train we see once more a long line of dainty, white-robed brides and girl graduates. A flutter of preparation and anticipation has pervaded many households during the months just past, and now, the last stitches taken, the exquisite details all complete, the June bride passes before us for a brief, bewildering moment, pausing for our congratulations and hearty good wishes, then on into the new life which lies just before.

Our hearts thrill with tenderness as we listen to the spoken vows which unite so many young lives at this time, and our prayers go out for them, that in the years to come, as the dark threads and the bright shall weave themselves into an exclusive life pattern for each pair now starting upon the long journey together, love shall not fail. In joy and in sorrow, whatever betide, may their united lives be illumined by this priceless gift to humanity.

As in the sweetest strains of music, a faint note of sadness runs throughout the festivities, yet adding to rather than marring the perfect whole. Changes are wrought in the dear old homes from which the young people go out to establish their own. Parents, while rejoicing in the happiness of their children, experience a keen sense of loss as they adjust themselves to the new conditions, and sisters and brothers draw closer to each other as the gaps occur in the home circle. Yet these are not depressing circumstances, and we hail the June bride as quite the sweetest thing in this month of enchantment.

Not less interesing is the girl graduate, who is seen in throngs on every side, even as the roses burst into masses of bloom and fragrance at this time. Schools of every description during this month bestow the diplomas which mark the close of a chapter at least of educational life. The theorists who are trying to solve the problem of the college-bred girl are confronted by this latest edition of her kind, a strong, lovable creature, who, with diploma in hand and eager face, sobered a trifle perhaps by the thought of the happy school life she is leaving behind forever, stands upon the threshold of the untried future.

It is not the purpose of the writer to offer any opinions or suggestions as to the wisdom or otherwise of her present status. One thing is certain: earnestness, faithfulness, diligence and self control are proven by her successful completion of the prescribed courses of study, and these attributes will prove of great value wherever she is placed, whether she becomes the happy bride of some future June, or enters upon a life of professional service, leading possibly to fame. Yes, even though it be necessary that she procure the means of subsistence by personal effort in some humble capacity, the discipline of the school and the educational equipment there acquired will be an inestimable source of help and inspiration. The strongest natures are often the sweetest, most tender, and woman loses nothing of her charm because well poised and self reliant.

ELIZABETH ROBBINS BERRY.

The Workbox.

BABY'S BOOT.

Use cherry and white, blue and white or any color with white, Fleischer's Germantown yarn. Chain 8 stitches with color, turn, and work into the first from the hook.

Double crochet into every loop, and in the middle stitch you must always increase by working 3 into 1. You must crochet into the back part of the loop in the second row, so as to make the work run in even ridges. Every row is the same, always increasing in the middle stitch by working 3 into 1.

When 15 ridges are done you must make the side, by working the first 11 stitches backwards and forwards for 30 rows or 15 ridges. Now leave off at this part, and go on at the toe for the sole. Work 8 double crochet.

The next row increases by working 2 stitches into the middle loop. Continue in this way, not forgetting to increase, until 5 ridges are done. Now decrease at the beginning of every row until you have only 8, continue to work on these 8 until 9 ridges are finished. Begin to increase again by working 2 into the middle stitch. Do 2 rows this way and then stop the increasing. When 12 ridges are done, sew up.

Take up 30 stitches in white very loosely for the leg, first doubling back the three-cornered flap and tacking it down.

2d and 3d rounds—In double crochet.

4th round—(*) Double crochet, 2 chain, miss 1 loop, work into the next loop. Repeat from (*). Do these 2 chain rather tightly.

Two more rounds in double crochet.

The fourth round again.

A round in double crochet.

Finish with a row of holes to run ribbon in. Edge these holes with a pretty scallop.

EVA M. NILES.

Slow Cooking.

The advantage of slow cooking under certain circumstances cannot be disputed. In order to extract the flavor of meats the soup must not reach the boiling point, but merely simmer. To make a custard, the heat, whether the custard be baked, steamed or boiled, must be slow and steady. If a custard is cooked rapidly, it curdles,—that is, the yolks and whites of the eggs toughen and separate from the liquid part of the milk. The housewife says her custard has "wheyed" when this happens. It is virtually the same conditions that causes the albumen of meats to toughen when the meat is cooked at too rapid a rate in water.

When the meat is served, and is not dissolved into broth, intense heat is wanted for a short time. This toughens the outside of the meat and forms a coating through which the heat cannot easily penetrate. After this coat or crust is formed on the outside of the roast, broiled, fried or boiled meat the rate of cooking must be lower, but kept at a steady point in order to finish the work of cooking. All processes of cooking that do not allow for slow and fast cooking are faulty. It is impossible to cook macaroni and other paste foods successfully by slow methods. Such foods must be thrown into an abundance of boiling water. Potatoes, green peas and other leguminous foods require rapid cooking in a small amount of water, which should boil off before the process of cooking is through, and leave the vegetable to steam during the last ten minutes of the cooking.

There are at least four degrees of baking heat required in doing the baking of a family. The hottest oven that the ordinary range will give is one that turns writing paper dark brown in ten minutes. This is the heat suitable for fruit, pies and pastry, and roasting meat at first. A little slower heat, "light-brown-paper heat," is suitable for muffins, rolls, for cheese ramakins, for braises and for roasting meat when it has been crusted over. A "light yellow paper heat,"—that is, the heat which turns writing paper a light yellow in ten minutes, is sufficient for bread or pound cake, and a still less degree of heat is sufficient for sponge cake, angel cake, meringues, custard and other slow baking. It requires a range or regular oven to give all these degrees of heat.

The disadvantage of most summer stoves and most modern methods of simplifying the cooking of the family in the summer is that they are monotonous. If all the food could be cooked satisfactorily by the slow methods of some summer stoves or by the various methods of others, there would be nothing to complain of, but this is not the case. The stove that does a variety of things, that gives different degrees of heat to suit different processes of cooking, must be a somewhat complicated stove, and the advantages of the average summer stove are more than overcome by disadvantages in the limited range of work that can be accomplished by it. These stoves do all that the average cook asks for from her range, but this is a poor criticism on the knowledge of the cook. An intelligent cook knows when a slow heat is demanded and when a rapid heat is needed, and it is her knowledge of the baking, braising, broiling and boiling capacity of her stove which is her chief recommendation, as any one can test and try recipes, but not one cook in a thousand knows when to regulate the dampers of her oven or of the top of her stove, so that the food she is cooking shall be cooked to perfection. When our housewives recognize cooking as an art that can be no more readily "picked up" than the art of playing the piano cleverly, we shall have happier homes, because there will be less indigestion and less ill temper. The good housekeeper, other things being equal, is a more amiable, happier woman than the slattern. She has the satisfaction of accomplishing her work in the best manner, and a clear conscience, which goes a great way toward making one happy and contented.—Tribune.

The Art of Dish Washing.

The washing of dishes is regarded as a very little thing, something which anybody can do. The most ignorant of servant maids is insulted if you inquire as to her ability in this respect, and resents any reluctance on your part to entrust your most precious china to her tender mercies. Watch her, however, and see how she handles it; piling glass, silverware and china, thick or thin, into one promiscuous heap in a not over-clean dishpan; pouring a kettleful of water over it, the water boiling hot, or barely warm, as may happen to suit her convenience and the state of the kitchen fire; slashing the whole around, chipping and cracking it more or less in the process; draining the dishes, one upon top of another, without regard to weight or decoration, while the greasy water streaks on their dull surfaces; and finally wiping them, two or three at a time, upon a dingy, musty towel. Verily the sight is not one calculated to increase the appetites of persons destined to eat from dishes thus washed.

In these days of dainty table appointments great stress is laid on sparkling glass, shining silver, and pretty, not to say exquisite, porcelain. The proper care of these treasures is no mean part of household duties. In the days when the mistress of the house, following the example of Martha Washington and Dolly Madison, washed her own breakfast dishes, there were fewer lamentations over breakages and less trial of temper over chipped edges. Washing dishes was a function in the Old Virginia mansions of that day. Every morning and evening, when the breakfast or supper was over, the colored major-domo brought a low table into the dining-room and placed it at the mistress' right hand. On this he put two cedar tubs hooped with brass, polished until it shone like gold, a large one for washing and a smaller one for rinsing, rather more than half filling each with hot water. Near these he placed a pile of clean towels, fragrant with sunshine and fresh air. The soap cup was a gourd, with holes bored in the bottom, better and stronger than any modern soap shaker, and thus equipped, the dishes were washed and rinsed, one by one, by the ladies of the household. No wonder that china lasted from one generation to another.

To wash dishes properly begin right. Make ready for the work by clearing off neatly, removing every crumb and bit of food from each dish. Drain cups and glasses; group each set of dishes by itself, placing the cups and saucers together. Put the silver on a small tray or on a dish by itself. Pile plates and platters carefully and in order, the greasy ones apart from the rest. Have plenty of hot, not merely warm, water; soap which will make a good lather, or better still a good washing powder and plenty of clean towels. Whether a dishcloth or mop is used depends upon your preference, but it is well to have both, a mop being indispensable for the cleansing of pitchers, glasses, etc. Besides, you may wash dishes with a mop without ever putting your hands into the water, thus keeping them from chapping in cold weather. If you use soap, have a soap cup, and never let your soap get into the dishpan. Dip the cup up and down, rubbing the mop on the soap until the dishwater is sufficiently soapy; just the proper degree of soapiness requisite must be learned by experience. By doing this you avoid all danger of finding bits of soap sticking to the dishes when you are through.—American Queen.

Telling Stories to Children.

When one speaks of telling stories to the little people, prose narratives seem to be commonly understood, and as commonly used, but there is no mistake greater than to suppose that children are not susceptible to the charms of poetry. They care more for poetry, on the contrary, than the majority of grown people, whether for the melody, the rhythm, the rhymes, the short lines, the simplicity and picturesqueness of expression, or for all these reasons together, which make it a thing pleasantly different from common speech. Goethe advised that every child should see a pretty picture and hear a beautiful poem every day, and if we would not banish the charm of poetry from mature life it behooves us to follow his advice and subject the child to its influence at the time of the greatest susceptibility.

We must beware, however, of giving a one-sided development by confining ourselves too much to one branch of literature. We must include in our repertory some well-selected myths, fairy stories which are pure and spiritual in tone, and a fable now and then. Nature stories, hero tales, animal anecdotes, occasional narratives about good, wholesome children, neither prigs nor infant villains, plenty of fine poetry, as has been said, and for the older ones of the family legends, allegories and historic happenings. A large stock of stories is not essential for little children. They feel, as Bulwer said, the beauty and the holiness that dwell in the customary and the old, and they are well pleased,—and it is best that it should be so,—with hearing the same old favorites repeated again and again, in song or in story, from their mothers' lips.—Ladies' Home Journal.

Homely Proverbs.

Suspicion has a key that fits every lock.

Don't pull the house down because the chimney smokes.

If you give me a knife give me a fork, too.

Give me to drink, but drench me not.

A hole in the purse, and the cupboard the worse.

The fuller the hand, the harder to hold.

Stroke the dog, but beware of his bite.

Heap on the coals and put out the fire.

The fool kept the shell and threw away the kernel.

One cock is sure to crow if he hears another.

In comes the fiddler and out goes the money.

The shorter the wit the longer the word.

Saw off any branch but that you are sitting on.

My partner ate the meat and left me the bone.

If you break your bowl you lose your broth.

Don't wait till it is dark before you light the lamp.

Every bell must ring its own tone.

If you shoot one bird you scare the whole flock.

Beware of pride, says the peacock.

You must shut your eyes if the dust blows in your face.—The Academy.

Enjoyment in Occupation.

It is well for a woman at a very early age to endeavor to secure enjoyment in occupation. Books, sewing, the arrangement of her home, music, the care of pets, all help her to enjoy hours of solitude rather than fretting for the unattainable in the matter of human companionship. One's own thoughts can be so trained that they are as sentient as the most conversationally inclined individual.

The day spent in idle longing for some one to drop in or in wishing that she might go somewhere or do something gives to a woman that look of discontent that is fatal to beauty, and is futile so far as beneficial results, either mentally or physically, says the Philadelphia Times. On the other hand, with good books for friends, a woman is in touch with intellectual kings and queens. She is storing up treasures of memory that will be a never-failing source of pleasure when the twilight of life comes, and she must depend on her fund of reminiscence for her daily comfort. Occupation of the right sort is the greatest cure for loneliness and a safeguard as well.

The Art of Dusting.

It requires considerable deftness to dust a room thoroughly and reach every cranny and corner dexterously. The mere driving of the dust with a feather duster from one part of a room to another is not sufficient. It should be taken up with a cloth duster. One of sheer scrim, which can be thrown into a solution of boiling hot soda and water and scalded out, is better than anything else. Woolen dusters are not as easily washed as cotton. The dust on walls and ceilings should be removed by brushing them off and down with a long, light-handled brush adapted to the purpose, or with a broom over which a cotton cloth has been tied.—N. Y. Tribune.

Domestic Hints.

BAKED TOMATOES.

Wipe and remove a thin slice from the stem end of the tomato. Take from the centre the seeds, not the pulp, season with salt and pepper, and place in a well-buttered pan. Bake twenty minutes.

VEGETABLE SOUP.

Prepare and chop fine sufficient carrot, turnip and celery to measure one-half cupful each; one scant pint of finely diced potato and one onion thinly sliced. Put the potato aside, mix the other vegetables, and brown slowly in four tablespoonfuls of clarified dripping. Add the potatoes and cook for a few moments longer, then add one quart of boiling water, cover closely and simmer for an hour and a half, stirring occasionally to thoroughly mix and break up the vegetables. Season well with salt and pepper, add one tablespoonful of finely chopped parsley and serve.

BAKED SOUFFLE POTATOES.

Select potatoes which are of the same size. Wash and scrub them thoroughly and bake in a very hot oven. As soon as tender cut the top from each and scoop the potato into a heated bowl. Mash smoothly, adding for each potato one-half of a tablespoonful of butter and one tablespoonful of cream. Season with salt and pepper to taste and whip until light. For half a dozen potatoes whip the whites of two eggs to a stiff, dry froth, cut them lightly into the mixture and refill the shells. Arrange in a pan and return to the oven until heated through and a pale brown on top.

FARINA CROQUETTES.

Put one-half pint milk into a double boiler, add slowly four level tablespoons farina, stir till it thickens, then remove from the fire, add the yolks two eggs well beaten, one-half teaspoon salt, a dash pepper and one teaspoon fine chopped parsley, turn out to cool. When cold form into cylindrical croquettes, dip into egg, then in bread crumbs and fry in hot, deep fat. Drain and garnish with parsley.

THE MISCHIEVOUS KITTENS.

TEA PUNCH.

Tea punch continues to be the favorite beverage at five o'clock teas. To compound it, allow one tablespoonful of any strong tea to a quart of boiling water. Pour the water on the tea and allow it to stand until cold. Strain. Meantime, add to a pint of sugar the juice of three lemons, the juice of three oranges, the pulp and juice of one shredded pineapple, and allow all to stand until the sugar is dissolved. When ready to serve, add the tea to the fruit juices and pulp, with a quart of apollinaris water and a box of fresh berries or thinly sliced peaches. Pour over a block of ice in the punch bowl and serve.

COLD STRAWBERRY SAUCE.

Hull, wash and drain a basket of ripe strawberries and press through a potato masher. Boil together three quarters of a cup of sugar and half a cup of water for ten minutes. Cool thoroughly, add the strawberry pulp and if desired a half teaspoonful of vanilla. This is particularly palatable with blanc mange or cottage pudding.

Hints to Housekeepers.

Little onions are now boiled and served on toast, after the manner of asparagus. This affords a change from the stereotyped way of serving, and will usually be found most acceptable.

Of course every good housekeeper sees that the stains are removed from the linen before it goes into the wash. If it is not convenient for you to use lemon juice and salt to take out iron rust spots, it may be easier to buy lemon salts to keep on hand for such an emergency. The salts are somewhat stronger than the lemon. Grass stains will always yield to cream of tartar if the spot is wet and well rubbed.

To care for a person who has fainted, lay the person down, keep the head low, loosen the clothing, give plenty of fresh air and dash cold water in the face. Smelling salts and stimulants should only be used when consciousness has returned.

To detach a book plate, cut a piece of flannel the exact size of the label; dip in cold water, wring it out, and apply it to the label; cover it with a clean piece of blotting paper, then pass a hot iron over it several times, and the label may be easily removed.

A dainty way to prepare radishes for the table is to cut a morsel off the tip of each, leaving at the other end the heart leaves and a bit of the stem. Cut the skin down from the tip in five or six places, bending each piece slightly outward to simulate the petals. If this is carefully done, the radish takes on the appearance of a half-opened flower. Of course, the radishes with the red skins give the prettiest color effect, though the new yellow ones are not without beauty.

Turpentine and linseed oil in equal parts make a good mixture for furniture. For sun streaks a solution, one-third sweet oil and two-thirds alcohol, is an excellent mixture. A soft cloth slightly dampened with kerosene will restore the polish.

Linen will last much longer if soaked, and then steamed or boiled without rubbing. Let it boil about five minutes. Rinse very thoroughly. Did you ever notice iron-rust spots in your linen for which you could not account? There were caused by the laundress who was careless about rinsing and left the soap in.

A novice can paint window sash nearly as well as a professional by using a piece of tin the size of a pane with a handle. Wipe off any adhering paint with a cloth moistened with kerosene. To imitate frost glass put some putty in cheese cloth and twist the ends to form a pad, then with it pat the glass until well covered with a milky white stain. When perfectly dry give a coat of good varnish.

"If you are late in putting out your seed," says the woman who has a garden, "if you will only remember to soak your sweet peas and nasturtiums over night you will find that they come up much more quickly."

Persons suffering from diabetic troubles often find difficulty in getting the pure gluten bread at the baker's. It can, however, be readily made at home, with the assurance that neither milk which contains sugar nor sugar itself enters into its composition. In the winter, the sponge can be set at night, but in the summer it is advisable to set it in the morning and make later in the day. Dissolve half a cake of compressed yeast in half a cup of lukewarm water, with a teaspoonful of salt, a tablespoonful of butter, and flour to make a stiff batter. When thoroughly mixed, beat in the whites of two eggs and let it rise. When light, add only sufficient gluten flour to mould the loaves, as it should be as soft as it can possibly be handled. Put in greased pans, let it rise again until light, and bake in a moderate oven three-quarters of an hour.

The Fashions.

*** Summer cloths and foulard, and stamine of canvas and foulard, form very smart gowns. A few of the latest gowns are double-skirted, but the majority are in one piece when made of wool of any description.

*** A pretty pink evening gown is perhaps worth describing. The skirt is of tulle, with two flounces surrounding it. The overdress of lace is cut with a tab in front and a rounded tunic behind. The entire corsage is of guipure, with a drapery of tulle about the decolletage, ending in a big chou on the left side. The left shoulder strap is of tulle, the right being covered by roses in different shades of pink. This gown is to be worn at a "rose ball." Colored balls are one of the whims of Paris society.

*** The new, lovely rose color called American Beauty is a prominent shade among rich or dainty summer textiles, and on French millinery in hats entire or among the striking accessories.

*** Figue comes in a pretty shade of red and will be smart for seashore gowns. It is used now for waistcoats, with cloth skirt and jacket suits, and is trimmed with rows of small gold buttons. Buttons increase in popularity, and perhaps replace the spangles, jets and colored stones that have ceased to find favor. The fashionable light-weight cloth will be useful this summer for outing suits.

*** White trimmings are greatly in evidence on summer gowns of every description,—white lace, white chiffon, tulle, etc. Cloth dresses, those of veiling, crepon and henrietta cloth, have white pipings and folds, and where gowns are handsome enough to use white mousseline de soie ruching, delicate applique pieces in point de Venise are generally added, with a guimpe of the mousseline in rows of tucks, or shirred puffs alternating with bands of lace insertion to match, and finishing with an insertion collar edged with Venise point.

*** The dressmakers have had little novel to show this week. Some pretty half-long capes are being made with embroidered fronts, separate from the garment and after the manner of a waistcoat. Cloth generally forms the cape, and embroidered satin or velvet the waistcoat. No wardrobe is complete this season without a long and elaborate cloth cape.

*** A very stylish costume from Paris is made of shallow gray summer cloth trimmed with white lace and black velvet ribbon. The underskirt has a ten-inch circular flounce of gray silk veiled with a white lace ruffle of the same width. The overdress is of gray cloth, scalloped at the edges, and bound with black velvet. The open bodice has a vest and collar of white lace over gray silk, the vest being arranged a la Breton, with three horizontal strips of velvet. Silk and lace frills finish the edges of the open waist. These are turned back like revers.

*** The prettiest gift at a wedding the other day was a book of doilies made like an old-fashioned needle book. It was of white linen, marked in white on the outside "Doilies," while inside were flannel leaves with sheets of blue tissue paper, and alternately between them thirteen beautiful embroidered doilies, the work of one of the bride's friends.

Life the Supreme Aim.

BY LILLIAN WHITING.

"As garment draws the garment's hem
Men their fortunes bring with them."

"Useless to Thought is added Will
Apollo is an imbecile."

"Laurel crowns cling to deserts
And power to him who power exerts."

The earning of a living is a means to an end, and the end is life. Life is the supreme aim, and the getting a living is the subordinate one; but, like all means to ends, it is, chronologically speaking, the first essential; not the most important essential, but the initial one, the indispensable condition. Now one's life may far transcend one's occupation, and while it is desirable to have one's work in the way of one's best expression, this may not always be achieved at first, and it is quite possible for any man or woman to do the work not especially congenial, and yet live his life well, and even nobly and enjoyably. The painter would prefer an easel to a desk; the poet prefers a pen to a clerkship; the minister would choose a pulpit and a parish rather than a college professorship or a business position; the musician would rather practise his art or teach his art than to do anything else, and to make the expression of one's tastes and talents his means also for a livelihood is certainly the more favorable and ideal condition. But failing this, and being without resources, then what? Shall one refuse any part or lot in the great world of activities because, indeed, he cannot do the thing he most desires? Both Longfellow and Lowell found a professor's chair in Harvard extremely irksome. Each longed for the liberty that the poet, of all others, perhaps, most ardently demands. Yet each fulfilled his task, and fulfilled it well, through many a year, until they achieved a liberation from it.

Of late Boston has been stirred to its foundation stones by the report that the Rev. E. Winchester Donald, rector of Trinity Church, had said he disliked women's colleges. The local press teemed with editorials and interviews on the matter, until one would have supposed that the future of every institution in the country was threatened, to judge by the danger signals. One does not need to be a communicant of Trinity or a member of Dr. Donald's parish to yet realize that his work for the community in general, his personal contribution to all that makes for the enlightenment and the enlargement, as well as for the redemption of life to diviner planes, is simply immense. His preaching, constant, faithful and eloquent as it is, is still but one among the many forms of his personal activity. His daily life might, indeed, well be cited as almost the fulfilled ideal of the ministerial life.

When such a man makes any criticism on contemporary progress it must inevitably have a weight of influence, and be drawn from existing conditions; and one of the conditions that exists today suggests the question: Does a college education educate women in the sense of developing their capabilities, and giving them a true mental attitude toward life? Concerning the women endowed with special gifts, this question need not be asked. The girl who has a specialty, and who becomes a physician, a teacher, an astronomer, a writer, an artist—what one will—she is eliminated from the discussion. It is the apparent results of learning—erudition as distinguished from intellectuality—that Dr. Donald fears: the results that isolate the college woman from the average life she might enter into, and that do not impel her into its equivalent in any other direction. For instance; the women who might have been useful in some form of the various industries as distinguished from the arts or professions; but who, because she has a college education, feels that to be *infra dig*, and is yet not fitted for any other life, and who is thereby isolated from the current of activities, and is, therefore, a burden on some one else.

"I suspect that what wrung from me the remark which has created so wide a perturbation," said Dr. Donald in reply to a question, "is my experience in meeting and advising with scores of educated, refined, learned women, who, thrown upon their own resources, cannot find the sort of work they think their education has alone fitted them for, because there is not enough of it for all applicants, and who seem and seem in vain to be unfitted for the kind of employment which is open to them. Nothing in my life as the head of a great parish begins to cause me the heartache these pathetic instances of powerlessness to gain place and bread do. A majority of these women are from the country, they tell me of their inability to live away from what the city gives in the way of opportunity for culture and congenial companionships. No wonder, one begins to doubt the sociological value of too much education," continued Dr. Donald, "when he sees in concrete examples what it has resulted in as respects unfitedness to live under necessitated conditions. It is a deep and intelligent sympathy with personal victims,—not a theoretical objection to a college for women,—which led me to speak. I should be glad to be compelled to reverse my judgment, which, at least, is not singular, for in the last few years I have found myself in respectable, if not respected company. Of course, there are conspicuous and shining exceptions among college women, but I was not making an inference from exceptions."

That the observations made in Dr. Donald's experience are true, there is no room for doubt. It is a range of observation supported daily by fresh facts.

Does not the solution of the perplexity lie in the fact that an educated woman, like an educated man, should, if she has no special gift, enter into the average avocation, and only bring to it more ability, more energy, and also more power for enjoyment outside of her work, if not in it, because her mind is better stored and disciplined? Instead of refusing to enter into trades and industries, because, indeed, she has an education, let her be the better dressmaker, the better accountant, the better typewriter or whatever it may be, and if her attainments are of so superior an order, let her feel,—"My mind is a kingdom is."

The educated woman should be able to bring far more endurance, patience, serenity and faith to her aid, in whatever limitations of condition or weariness of drudgery, than the uneducated one; and if she cannot, or does not; if her education is to her a sort of Mahomet's coffin that cannot touch heaven and is debarred from earth; if she cannot enter into the life of a country home and enrich and enliven and exalt it, because of the better opportunities she has enjoyed; if these opportunities have left her restless, unsatisfied, unable to relate herself to the common duties of life, then, indeed, all intelligent sentiment would emphatically support the truth as stated by Dr. Donald. If a woman has the inestimable advantage of the higher education let her show it forth by her life as well as by her lips; let her add the power of will to whatever power of thought she may have; let her be not too fine for average duty, but fine enough to take it up ably, bravely, nobly, knowing that only through the fulfilment of the lesser will she be able to enter on the road to the greater and the higher life.—Boston Budget.

NOTES AND QUERIES.

GENUINE RUSSIAN TEA.—"W. H. C.": The genuine "Russian" tea is not tea made and allowed to cool, but tea just brewed. One teaspoonful of tea is allowed to each cup of boiling water, which is then allowed to steep on the hearth or table for fifteen minutes. The glasses are then filled three-quarters full of cracked ice, chipped so fine that it cools the tea immediately, and then boiling tea is poured on. One teaspoonful of lemon juice and one slice of lemon completes the "cup which cheers." In making tea, scald the pot, which should be either of silver, granite-ware or earthenware—not tin. For moderate strength, allow one teaspoonful of tea to half a pint of freshly boiled water. Pour slowly over the tea, and let the pot stand where it will heat the boiling point, yet will not boil, for from three to five minutes keeping tightly covered. Serve in hot teacups.

SYNOPSIS OF THE INHERITANCE TAX IN THE INTERNAL REVENUE LAW—"A. R. W." (1) Where the heir is the lineal issue or ancestor, or a brother or sister, the tax varies from seventy-five cents to $2.25 on each $100. (2) When the heir is a nephew or niece, it varies from $1.50 to $4.50. (3) When the heir is an uncle or aunt or first cousin, the tax is from $3 to $9 on each hundred dollars. (4) Where he is a great uncle or great aunt or second cousin, the tax is from $4 to $12, and (5) where the heir is a more distant relative, or is not a relative, or is a corporation, the tax is from $5 to $15 on each hundred. The lowest amount of tax in each case is on sums more than $10,000 and less than $25,000 the highest on amounts of not more than $1,000,000.

TO COOL DRINKS WITHOUT USING ICE—"W. F. C.": Wrap the bottle in a cloth wrung out of cold water and stand it in a vessel filled with cold water. Place the vessel on a window sill and produce a draught by means of open doors.

Expensive Fish:

"How much did those fish cost you?" asked the friend who met him at the pier.

"They have cost me a dollar and a half in boat hire, half a dollar for minnows, half a dollar for the fish, a quarter for hush money to the chap who sold them to me, a suit of clothes, and probably my church membership," replied the Sunday fisherman, with a hunted look in his eye.—Chicago Tribune.

Achieving His Ambition:

"And by the way," asked the old schoolmate, "what has become of Mosely, who used to talk so much about devoting his life to uplifting mankind? Did he go into the ministry?"

"No," answered the other schoolmate, "he is in the elevator business."—Indianapolis Journal.

POETRY.

(Original.)

THE DOUBTER.

The doubter falt'red "Why does God
Not seek me now and here?
Long on earth's pathways have I trod,
Yet doth he not appear."

One answered, "Doth the planted seed
Wait for the golden sun,
To pay to it a special heed
E'er its vast work's begun?

"Can man, or like the seed, distrust
His Father's loving care,
When towards the sky the sprouts have thrust
Their blossoms everywhere?

"Seek thou first God, and thou shalt find
That he is seeking thee;
That thou hast been to spirit blind,
And now at length do see!"

ARTHUR E. LOCKE.

Newtonville, Mass.

THE WARNINGS.

I was milking in the meadow when I heard the
banshee keening;
Sweet slept the little birds of May—the young
lambs on the lea;
Upon the crag of Silvevnamon the round, gold
moon was leaning.
She parted from the hillside as the banshee
keened to me.

I was weaving by the window when I heard the
death watch beating,
The silence started tingling like the wind
within a tree;
High and fair through cloud and air the silver
moon was floating,
But the night began to darken as the death
watch beat for me.

I was sleepless on my pillow when I heard the
dead man calling,
The dead man who lies drowned at the bottom
of the sea;
Westward away through gloom and gray I saw
the dim moon falling.
Now I must rise and go to him, the dead who
cries on me.

—Alice Furlong, in The Speaker.

MY LITTLE LOVE.

My little one's eyes are as blue as the sea,
They are blue as the skies above;
Her lips coral red, teeth white as the pearls,
And her voice speaks the language of love.

Tiny feet flying swift, where the incoming tide
Breaks, light as the wind driven spray;
When in foam flakes 'tis swept from the crests
of the waves
Into mist, as it drifts o'er the bay.

Her laugh, so seductive, is silvery sweet,
Her smile's like the sunshine, ere clouds come
between.
She's a creature of impulse, of whims and of
fancies,
A sprite most bewitching, my fairy, my queen.

Over the Ocean of Life may she sail onward
happily,
And God's angels guard her from storm ever-
more;
Until safe from the turmoil of tempest or ship-
wreck,
My little love rests on eternity's shore.

—Gertrude Donaldson, in St. Paul's.

AN OLD FAN.

A dainty thing, with rare illumination,
Old lace grown yellow, lines of faded gold
Whose arabesques uncertain gleam, and faintly
Worn by much careful closing, fold by fold.

Ages ago, these tarnished colors trembled
With new-born life, thrilled from the hand of
Art;
Each wondrous fancy, by the touch of genius,
Graving its beauty on "my lady's" heart.

Swinging from slender wires, in old cotillons,
Or sinuous, languorous, matchless minuettes,
With princes vis a vis, to airs Sicilian—
One marvels if the fan itself forgets?

In Louis's court, under great candelabra,
The tale of love, traced by the painter's hand
Made the sweet text for many a declaration,
That gave rejoicing to a kingly land.

Now all are gone, kings, queens and courtiers
faded
Into oblivion; still some grace is thine—
The magic of the past; its rare traditions
Live in thy dim, fair realm, old fan of mine.

—Mary A. Denison, in Collier's.

THE CLUB WOMAN.

Libraries, both the public and
Her private one at home,
She turrowed in both night and day,
And never cared to roam.

A thousand books her eyes consumed,
In Sanscrit, Latin, Greek,
Slavonic, Hebrew, French, Chinese,
Both modern and antique.

She would not even stop for meals;
Without a pause she read,
And 'tis a fact, for nights and days,
She never went to bed.

Her house was filled from wall to wall
With all the notes she'd made,
And when her husband wandered in
He had to use a spade.

At last the great day came around
For which she'd toiled and planned;
Before the culture club she stood,
Her paper in her hand.

Then after all her weeks of toil,
And burning of the gas,
She had the awful nerve to make
This introductory pass:

"You must excuse my paper, for
I'm so ashamed of it,
But, honestly, I've been too rushed
To study up a bit."

—Kansas City Independent.

HEREAFTER.

As one who waking in the night
From off the pillow lifts his head,
While o'er him comes a sudden dread,
And yet he dare not speak a light.

And so he will not search it out;
There may be naught, he does not know,
But lest to surety doubt may grow
He lies and hugs his trembling doubt.

O, anxious son', by thoughts oppressed
Of that dread future, far, yet near,
Cease to essay the question here;
Death will respond or else give rest.

—E. B., in Lantern World.

A PARADOX.

'Tis paradoxical, but true,
That love is blind, and seeth too.
Love blind? That cannot be,
For it has had me not led me
To one so fair.
Love blind? That must he be
To make one such as thee
My presence bear.
That love is blind yet seeth too
Is paradoxical, but true.

—Pall Mall Gazette.

Music hath charms to soothe a savage breast,
To soften rocks or bend a knotted oak.
I've read that things inanimate have moved,
And, as with living souls, have been inform'd
By magic numbers and persuasive sound.

—Congreve.

....Ideals die too fast, 'tis said,
But then why should we mourn?
For every one that shuffles off
At least two more are born.

—Chicago News.

....The speaker's shoes are vacant—
We ask, if it be meet,
Is there any other statesman who
Can fill them full of feet?

—Detroit Journal.

....Of dullness vast and wisdom small
(His conversation shows it!)
A bore is one who tires us all
And never, never knows it!

—John Oliwell.

Mattia's Love Affairs.

He had been away from his hills about three months; and, do what one would, for twenty days or a month he could not be made to smile. He had bawled like an ass on his threshing floor, which, encircled by tomatoes and pumpkins, was as big as a city square; and he had stamped about the farmhouse, yelling "No." He had spent hours in his beloved chestnut grove, all coiled together like a hedge hog; while, on the night before his departure, he had been found in the stable, hugging the cow closely and blubbering in her ear.

At sight of such a lubber, brown as a leech, loose jointed as an ape, and rank enough to be scented a mile away, his employers uttered a shriek. Mattia opened wide his mouth, his eyes, and his nostrils, bit his hat brim, and stood nodding yes and no. After a week of forced ablutions, they regarded him with less distavor. He no longer smelt bad, and his hair was less unruly, while the two tears that kept ever welling up in his eyes made their azure most beautifully transparent.

They put him into a plaid suit, with brass buttons and a slouch hat, whose brim flapped out like the wings of an immense harvest-fly; and, hanging a basket on his arm and sending him on trifling errands, they finally succeeded in fetching a sorry sort of smile to his phiz. Mattia scratched his pate, wherein all those little matters buzzed like a swarm of horse flies, opened the door, and dashed like a streak down the streets of Florence.

For a time he felt such a dizziness that he believed he was going mad. Then he began to look about him; he stretched his arms and legs, and raised his head; he gave a jaunting bend to his broad hat, and even dared, now and then, to pinch the maid servants in the market betwixt benches loaded with garden stuff and tables covered with plucked fowls.

His employers beheld him transformed. It was Mattia here, and Mattia there; the whole house was full of Mattia; while, down in the kitchen, Nanna and he seemed to see who could make the most racket.

Nanna was a tall blonde, with whitish eyes and skinny face; she had dwelt there for a half dozen years, making stews and pastry, and dreaming probably of somebody on her own account.

The first day that Nanna and Mattia met in the kitchen, they stood staring at each other like a couple of goats making ready to butt. Yet, when Mattia had had six or seven washings, Nanna slackened rope, while he drew it in. The spry, pallid, lanky maid put him in mind of his beloved tassels of corn on the slopes of La Borra, where in August the quails whistled, while he lay stretched on the ground, dead tired, beneath the burning kiss of the sun.

When the ice was really broken between Mattia and Nanna, the householders were abroad; and into the kitchen stole the smell of the garden, while green boughs touched the window panes, whence the sunlight was diffused over dripping pans and saucepans. Mattia had dropped into a seat, with his hands rolled in his apron, his white cap stuck on one ear, and his eyes glistening. He was thinking of the threshing floor, the farmhouse and the cow.

"What ails you?" asked Nanna.

He raised his head and saw the tall blonde standing right in front of him, with those big, staring, whitish eyes, and those dangling arms of hers.

"Nothing," replied he, and he put out his hands. But there re-echoed the thwack of a forcibly administered cuff.

During the fortnight that their masters were away, Mattia and Nanna did nothing but chase each other round the garden walks, and folks outside, hearing the shrieks and the laughter, poked their noses through the bars of the railing. The merry time lasted for a while, and then suddenly ceased. Mattia tarried in returning with his purchases, and, when he did come back, his hat was crooked, and he displayed a red face. One morning he forgot the potatoes, another the fish, and a third saw him appear with the basket empty. Nanna flew into a fiery fit.

"Why don't you behave yourself! You ugly plowboy, you; you can't do anything right!"

"Hush, Nanna!" cried Mattia, scratching his pate.

"No, no! you ugly plowboy!" she persisted. "Bad luck to them that took you away from the cow! You're fit only for the cow! You ought to have married the cow!"

Mattia tugged at his hair, and continued to scratch his pate.

"I wouldn't have married the cow; no, not I!" he retorted. "But I liked her much better than you."

Nanna's whitish eyes glared at him, and a chair came flying his way.

But let us not tarry in saying that a poem was stirring in Mattia's breast.

One morning, when Cliffo threw a chunk of meat into his basket, Mattia drew back and the meat dropped on the ground. Leprina's eyes had turned his head, and from that day he dreamed only of Leprina, thought only of Leprina, and ate with Leprina's face in every spoonful of broth and every forkful of meat.

For three or four mornings the two exchanged laugh, and there was an end. But afterward they got to walking together, talking fast and freely, with the wonted pauses, and making of sheep's eyes.

"I like you," said Mattia one day, looking into his basket.

She gave him a pinch, and laughed long and merrily.

"Why, what are you spooning over?" Nanna blurted out one evening, planting herself squarely in front of Mattia, who had assumed a mysterious air and was gazing at the moon through the casement. He gave a start. He was thinking of Leprina, but behold! only Nanna.

"I know!" she went on, while he held his peace. "I know, you ugly plowboy!"

"Nanna, be still!"

"No, no, no! You are just baked in love, like any thing!"

"I?"

"You!"

"I!"

Mattia rose to his feet and appeared to wish to make some sort of protest, but merely sat down again.

"You humbug!"

Here the scene ended; but there was poison in Nanna's heart. Mattia had the honey, and was keeping a close mouth.

He had set Leprina upon the altar of his hopes, and fancied how she would look up among his hills, all affection for him, with flowers about her and the full sunlight on her pretty little face. He fancied her there, on the tomato-festooned threshing floor, and in the farmhouse during the long winter evenings, with the fire flashes reflected in her black eyes, and he there, too, close by, envied, but so contented, overwhelming her with his caresses.

Upon such dreams Cliffo, the butcher, threw, so to speak, a jug of ice-cold water.

"Leprina," quoth he, "seems an angel dropped from the skies; but she isn't. Let Mattia beware. *A man forewarned is a man forearmed.*"

The result of this warning was a fist fight, and Mattia changed his butcher, without changing his mind in the least. Leprina smiled on him more sweetly than ever, and made him believe that he beheld a paradise, with seraphim and cherubim more gloriously depicted than by Dante Alighieri himself.

The first chance that Mattia had of hugging Leprina was one evening, just behind the wall of the Viale. The laurel boughs shielded them; silence surrounded them; while the moon cast its white radiance upon the little villas over the way. Amid the shadows could be discerned the girl's pretty head, studiedly inclined, and Mattia's visage uplifted, with its glistening eyes and its open mouth.

And above this little tableau, perched amid the leafage like an owl, was Nanna, apparently on the point of pouncing down upon them. Instead, however, when Leprina and Mattia put their heads together for a resonant kiss, Nanna vanished, with a stirring of the branches that caused the couple to turn round and look up, and then stare at each other.

"Goodby, Nanna!" said Mattia one day not long after. "My masters have discharged me."

Nanna did not reply. She had turned to her oven, and was looking at a saucepan that contained nothing.

Mattia touched her on the arm. Then she wheeled about, with two big tears dropping from her eyes.

Mattia was serene. He was dismissed, and he would go. The folks were not satisfied with him; so let them suit themselves elsewhere!

"Where do you intend to go?" inquired Nanna.

"Home."

"That is not true!"

Nor was it true. He would have gone home, had Leprina not been in the way. But there she was.

"Mattia, you want to ruin yourself!" exclaimed Nanna, in a strange tone of voice.

"Stay here, and I—I will go away myself."

She turned again to the saucepan, while a sort of a tickle smote Mattia in the stomach, which was beyond his comprehension.

"You shall remain alone, and be contented! Leprina—" She interrupted herself, and, suddenly turning round with an altered countenance, ejaculated square in his face: "You plowboy!" and walked away with her face in her apron.

Mattia stood somewhat amazed, but presently sat down once more, content not to understand anything further. A breeze stole in at the window and caressed his cheeks; and, little by little, Leprina, Nanna, frying pans, and dried sausages began to dance in a circle before him, till he ended by playing the bass fiddle for the ball himself! Something like two hands clasping his head and two lips pressing close against his forehead caused him to give a start, and burst into laughter. What things dreams are now and then! Why he could have sworn that it was Nanna!

Nanna reappeared.

"Don't go away," she urged.

"Why not?"

"Because I tell you not to go."

Nanna laughed, Mattia did likewise, and caught her hands in his. She let him have his way, while on her breast sank the head that put Mattia in mind of the tassels of corn.

"No, Nanna. I must go. If I have behaved badly to you, forgive me!"

She snatched her hands away, answering drily: "No!" and walked across the kitchen.

He was breathless with impatience to be off. Leprina was waiting for him. She had promised to go with him when he was free, even to the ends of the earth!

He was satisfied with less.

"Leprina, dear Leprina," said he, "I will lead you up to my home, and we'll live like princes of the Church. You shall attend to the cow, and I will work as of old. You shall see how Gianna, Venanzia, Galletta di Memo and Secca di Mestolo will be eaten up with bile. Leprina, won't you answer me?"

Leprina bent her head still further. She was ready to burst with laughter; she attend to the cow? She the wife of that block of flesh? Mother Eve deliver her!

They were in the Via Montebello. In the distance the tall acacias of the Cascine made one open one's mouth, to breathe with all one's lungs; while from the Fosso Macinante rose the exhalations from stagnant water and sun-fermented mud.

Leprina looked at the beautiful earrings that Mattia had bought for her with a little pile of money hoarded for a different and nobler purpose,—when he was still thinking about his old mother.

Mattia carried his bundle of clothes to a mean room in the Via Nova, where Leprina had promised to meet him again.

He now awaited her there, striding up and down, and, in fancy, fondling the slender little figure, whose like had never been seen at Maona among the hills.

When he had been obliged to part from her at the street corner, he had sighed with sufficient force to have extinguished a street lamp, had one been lighted; and he had scratched his noddle, and given most languishing looks. The gravity of the step he was about to take now impressed him fully. Not Nanna's wild-eyed face, warnings and threats, nor his employer's orders to return at once to Maona, nor his own secret misgivings, could avail to restrain him, for Leprina had promised to go to the ends of the earth with him.

"Until later!" he had exclaimed, while Leprina had answered "Goodby," and walked off, with her eyes fastened on the gold pendants.

Mattia, when a certain hour had come, fixed his eyes on his old silver watch, and, as the outer atmosphere gradually darkened, his countenance became white with emotion. Then just the reverse occurred, for, as the sky lightened towards morning again, his face grew more gloomy, until the broad daylight found him as dusky as a cuckoo. He had a crick in his neck from constant watching out of the window, an empty stomach, parched lips, and hair all tousled from the manifold scratchings that he had given his head. Hitherto he had never learned how to swear, but during this night he discovered a collection of original oaths. Rest he could not think of, and, uttering a curse, he sallied from the house.

Away, away, he sped through the streets, like a madman. High and low did he search, where ever there was a chance of meeting Leprina and flinging in her face the fury that devoured him.

"Can it be possible?" cried he. "After so many promises!"

When evening was again come, utterly exhausted, with his tongue protruding from his mouth, he rescended to the room that had been an inferno instead of a paradise. No news of Leprina. Not a soul had seen her!

Then Mattia thought of his old mother, and of the little hoard of quattrini which would have been a fortune for her.

"Thief!" he cried, hoarse with rage, "thief!" and there, where he had hoped to kiss an angel, he abandoned himself to weeping over the infamy of a demon.

A hand clasped his. He jumped up, with the tears streaming down to his lips, and a face to have evoked the liveliest pity.

Before him stood Nanna. Nanna, whom he had despised; Nanna, who had been able to give him advice; Nanna, who had kissed him on the forehead, who had followed him, and who now was gazing at him with those big white eyes full of tenderness.

With heaving breast Mattia threw himself on her neck in a way to have sent her sprawling on the floor.

Swaying to and fro, she let him have it out. The tears from his eyes fell on her dress, and the black locks of that great dolt mingled with her blonde ones; while sobs shook his chest and his feet stamped on the floor as if they would go through it.

She still suffered him to relieve his feelings for a while. Then, giving him a kick and flinging him on the bed, she giggled in his face: "You plowboy!"

He ceased to weep, and, pulling Nanna toward him, planted a huge smack on her nose.

There was a knock at the door. Ere Mattia could stir, Nanna had opened it and rushed out like a wild beast.

Mattia heard her gnash her teeth, and then began such a battle of cuffs and scratches as would have scared the dead out of their graves.

But it did not last long.

Nanna presently returned, with her face besmeared with blood, grasping Mattia's gift, which she had torn from the ears of Leprina.

"Look!" said she.

Bewildered and amazed, he took the earrings, gazed at them, turned them over, while one more tear, the last, of rage and remorse, dropped down. Then, so very softly and gently, he put the earrings in Nanna's ears, and said:

"They are thine."—Orazio Grandi, translated from the Italian by William Struthers.

YOUTHS' DEPARTMENT.

LOAFING DAY.

The lazy boy sprawled on his back and squinted
at the sky,
Wishing he were the long-winged bird that
slantwise sailed on high,
For day was lapsing swiftly, halfway from dawn
to noon,
And the breeze it sang: "O lazy boy, what
makes you tired so soon?"

But the lazy boy was silent, and he slowly
chewed a straw,
Vaguely mindful of the thrush that whistled in
the haw,
And half aware of bleating sheep and of the
browsing kine
Far scattered over slumbering hills to the horizon
line.

Happy, happy was the boy a-dreaming sweet and
long,
Fanned by the breeze that tossed the haw and
stifled the thrush's song;
For the whole glad day he had to loaf, he and
himself together,
While all the mouths of Nature blew the flutes
of fairy weather.

The year's great treadmill round was done, its
drudgery ended well,
And now the sunny holiday had caught him in its
spell,
So that he lounged, a lazy lout, up squinting at
the sky,
And wished he was the long-winged bird that
slantwise sailed on high.

It's good to work and good to win the wages of
the strong;
Sweet is the hum of labor's hire, and sweet the
workman's song;
But once a year a lad must loaf and dream and
chew a straw,
And wish he were a falcon free or a catbird in
the haw!

—Maurice Thompson.

A Real Giant.

It was a warm summer afternoon. Mamma was sewing on the porch, and John and Jane were playing in the shade of a large oak tree. Hearing the children laughing so merrily, mamma came to see the cause of so much fun. Finding a large, brown beetle, they had turned him on his back; and Jane was tickling his stomach with a long piece of grass to make him kick. It certainly was funny to see him draw up his legs so quickly and so tight to his fat, shiny sides.

Mamma looked on for a moment, and then said:

"I fear the poor little bug is not laughing or having a good time. Remember, he can see you; and to him you are real giants,—monsters with immense round eyes, and mouths as large as a lion's. Do you wonder he is in a great fright, and tries to run away?"

While the children were listening to their mother, the beetle turned over and began running off very fast.

"Oh, do let's all follow him, and see where he lives!" cried Jane. So away they ran in quick pursuit, mamma following more slowly, across the street, over Mr. Paine's lawn, next door, to the wood pile. There he went under a log. On lifting the log very quietly and slowly, without disturbing him, the children found Father Beetle, with Mother Beetle and all the little Beetles crowding eagerly around him.

"I wonder," said mamma, "if he is telling his family of what befell him this morning,—how he was seized by terrible-looking creatures, treated in a most cruel manner, and just escaped with his life."

"Dear me!" said Jane, looking sorry. "I didn't mean to scare him. I suppose a boy or a girl is a giant to a bug. Better come away, John, and let him have a rest."

Mamma was glad to see the children carefully replace the log and leave the Beetle family to themselves. She knew Jane and John wished to be gentle and good to all living things, that they did not mean to be cruel, but they did not always know what would hurt God's littlest ones.

Another day John's mother was shocked to see him thrusting a long brass rod down an ant hole. Think how terrible that must have been for the little helpless ants! Quickly she called him to her, and asked if he would like to hear a story,—a story about giants. There was nothing the children loved so well. So John called Jane, and they ran to the porch and perched themselves on the great arms of mamma's rocking chair, each finding a little hot arm around her neck and pressing their velvet cheeks against hers, to show how they loved and how good they thought her. This made their mother feel rested and happy. Then she began:

"Once upon a time there was a pretty little house, painted all white, with a climbing rose-vine over the front, covered with the prettiest and sweetest of roses. But sweeter than the roses were the little children who played about that house, and very happy they were in that dear home. One afternoon the mother, with the little ones, was sitting before the open fire popping corn and roasting apples hung by long strings from the mantel over the fire, when suddenly a great wooden club as long and large as a forest tree came crashing through the ceiling. The whole top of the house seemed to be tumbling in upon them! The cruel club went crunching, pounding and destroying; and the family, who a moment before had been so happy, lay bruised and crushed on the floor, and the pretty home of which they were so fond was ruined. A great giant had done it as he passed along."

"Oh! that is not a true story, is it, mamma?" asked Jane, in distress.

"It couldn't be," exclaimed John, soberly. "There are no real giants nowadays."

"It is true there are no giants now of that kind for my children to fear," answered their mother, very gravely. "But today my little boy was a cruel giant. With a great brass rod he broke through the roof of an ant's happy home,—a house that had taken them weeks of hard work to build,—and killed mother and babies, bruising some, and crushing others, and ruining their homes."

"O John," cried Jane, "the poor little ants!"

Then both children sat very still and grave thinking over mamma's giant story.

At last John put his head down on his mother's shoulder, and whispered earnestly: "I forgot that time; I'm so sorry. But I'll try to remember after this, and, if I am a giant, I can be a good one, anyway,—can I not, mamma?"

And after that the children seldom forgot. They remembered they were giants, and tried to be good ones. Instead of hurting or tormenting these tiny little creatures, they learned to love and watch them; and now Jane and John know many curious and interesting things about these insects and their habits.—Sunday School Times.

HISTORICAL.

—Soon after the accession of William III. to the throne of England, war was begun with France. This was in 1689, and for the next 125 years the two countries were in continual enmity. This long struggle was not inaptly named the Second Hundred Years' War.

—A book printed in England at the end of the seventeenth century says that Philadelphia contained many stately houses of brick, and several fine squares and courts. Between the principal towns the "watermen constantly ply their wherries." There are no beggars to be seen, nor, indeed, have any the least temptation to take up that scandalous life.

—Before Columbus completed his four voyages, other important discoveries had been made. In 1497, the mainland of North America was discovered by an expedition sailing from Bristol, England, the leader of whom was John Cabot. The land first seen by them was Cape Breton, or Labrador. An entry in the privy-purse of the shrewd Henry VII. notes that ten pounds were given "hym that founde the new isle," not a magnificent sum in light of the fact that upon this voyage of the Cabots England later based her claim upon the whole continent of North America.

—The first settlement in Louisiana was in 1699, and New Orleans was founded in 1718. This was some years after 1682, when La Salle in his little flotilla of canoes floated down the Mississippi to its mouth and took possession of the vast valley in the name of Louis XIV. By the time Louisiana and New Orleans were founded, little groups of Frenchmen had settled down upon the banks of the western rivers. Detroit was founded by Cadillac in 1701, and even thus early throughout the west the points of military vantage were chosen.

—What is now the State of New Jersey was part of the territory claimed by the Dutch under the name of New Netherlands. Before the English seized the country, something had been done to settle this part, although it had not developed as might have been expected in the fifty years of Dutch occupancy. The Duke of York, as proprietor of the territory newly acquired, ceded in 1664 this southern portion lying between the Delaware River and the sea to Lord John Berkeley and Sir George Carteret. The new province was named Caesaria, or New Jersey, in honor of Carteret, who as governor of the Island of Jersey had heroically defended it against the Parliamentarians during the great Rebellion.

—From the outbreak of the civil war in England, in 1642, until the restoration of the Stuarts in 1660, New England was allowed to govern itself, but Charles II. was hardly seated on his throne when he turned his attention to America. New Haven had received and sheltered two of the fugitive judges of the court that had condemned his royal father to death. In spite of its protestations, it was now annexed to Connecticut. The latter colony was given a liberal charter, which became very dear to the people, and Rhode Island, too, received a new charter. It is an interesting fact that Charles II., who in England gave no sign of loving free government, should have granted these two charters, so liberal and good that the people cherished them and kept them as their fundamental constitutions well down into the nineteenth century.

THE HORSE.

Gilt-Edged Breeding.

In controversy with the "horse editor" of one of our local dailies a dispute arose as to whether Ralph Wilkes was a well-bred horse. The "horse editor" claimed that his breeding was not among well-posted horsemen regarded as gilt edged. I maintained that the produce of a stallion ranking as Red Wilkes does among the great sires of speed, and a mare by Mambrino Patchen, acknowledged the best among brood mare sires, could not be considered anything but the bluest of blue bloods.

By mutual agreement, the matter is referred to you for decision, this stipulation on my part, if Ralph Wilkes's breeding is not *gilt edged*, what sire and what dam would produce a colt whose breeding could legitimately be considered as such. A. F. R.

Had "A. F. R." named some other horse whose breeding is known to be compared with Ralph Wilkes, and asked which of the two is better bred, the question could probably have been answered more satisfactorily, at least more readily. Opinions of well-posted horsemen differ as to what combination of blood lines constitute "gilt-edged" breeding. Some who are considered pretty good authority would not consider any animal's breeding "gilt edged" whose pedigree shows a thoroughbred cross, or an unknown one, within three or four removes, unless the animal in question had become greatly distinguished by producing uniform speed, like Alma Mater, for instance.

"Gilt-edged" breeding, as generally understood, means that the pedigree of an animal so classed must contain not only the very best combination of producing lines, but that those lines must come through producing individuals. It is doubtful if any pedigree expert would consider the breeding of any animal "gilt-edged" unless at least the second and third dams are either by sires which are noted producers or the dams themselves, like Dame Winnie, for example, are distinguished producers. There is quite a difference between a trotter that is "well-bred" and one of "gilt-edged" breeding.

Some well-informed trotting-horse men and practical breeders think more highly of a pedigree which has quite a close cross, say the second or third remove, of some such successful long-distance race winners as Boston, Lexington, Sir Henry, American Eclipse, Trustee, Wagner, Grey Eagle, Revenue, Planet, Williams' Belmont, Glencoe and others whose names appear in the pedigrees of first-class trotters, than of a pedigree made up exclusively of recognized trotting crosses.

During the past few years horsemen and pedigree experts have become better acquainted than they formerly were with the law of heredity, and the chances of atavism, or the reproduction of qualities which characterized some more or less remote ancestor. The more light they get upon this subject, whether by practical experience, or from studying the works upon it by the most noted authors, the more strongly they become impressed with the idea that the longer the unbroken chain of producers or demonstrated speed-producing crosses in the pedigree of the dam, the greater the probability that her offspring will possess great speed capacity.

The popularity or value of any sire, or any strain of blood, is measured by the ability which that particular sire or strain has shown to produce extreme, or at least race-winning speed, with uniformity. By common consent during the past few years, or ever since the standard was adopted, stallions have been ranked according to the number of their sons and daughters that have made records in standard time, rather than by the number of genuine race winners which they have sired, so we will analyze and weigh the crosses in Ralph Wilkes's pedigree by that standard.

There are but very few well-posted horsemen who will not admit that, opportunities considered, George Wilkes was the greatest son of Rysdyk's Hambletonian as a perpetuator of light-harness speed. No other horse that ever lived has yet got so many fast trotters and pacers, and the sires and dams of so many fast light-harness performers in an equal period of time, as George Wilkes got after he was taken to Kentucky in 1873.

All well-posted horsemen know that Rysdyk's Hambletonian was the greatest progenitor of light-harness speed of his day. The tables and records show that, and they indicate, too, that George Wilkes (2.22) was superior to Rysdyk's Hambletonian in this respect. The table also shows that as a sire of standard performers Red Wilkes now stands at the head of all the sons of George Wilkes. This being the case it is apparent that on the paternal side the breeding of Ralph Wilkes is "gilt edged."

Turning to the dam of Ralph Wilkes (2.06½) we find that she was Mary Mays, and that her sire was Mambrino Patchen. As a sire of dams of trotters with records of 2.30 or better, Mambrino Patchen outranks any other sire that ever lived. Daughters of Mambrino Patchen bred to George Wilkes and his sons have produced a greater number of fast light-harness performers than they have produced by any other stallion and his sons. The Wilkes-Mambrino Patchen cross is among the most popular and best that can be found today, provided that, back of the Mambrino Patchen cross are others of the best of producing strains. As his Ralph Wilkes was by Red Wilkes and his dam was Mary Mays, by Mambrino Patchen, Ralph Wilkes was certainly a well-bred trotter.

The second dam of Ralph Wilkes was by McConathy's Sarpedon, a thoroughbred son of imported Sarpedon. We do not remember to have seen this McConathy-Sarpedon cross in the pedigree of any other fast trotter. Whether the cross has ever been tested in other cases or not we are unable to say. The name McConathy's Sarpedon is not found in the great table of 2.30 performers either as a trotter or a sire of 2.30 speed. No son of his has to our knowledge ever sired a 2.30 trotter, and none of his daughters ever produced anything to take a record in standard time. For the above reasons, pedigree experts would be disposed to look beyond the Sarpedon cross for the element, or elements, that made it possible for Mary Mays to produce a faster trotter than has been produced by any other daughter of Mambrino Patchen.

Taking into account what her sire has failed to do, whether from lack of opportunity or ability, in the way of contributing to 2.30 speed, the second dam of Ralph Wilkes would not be considered by many horsemen well posted in pedigrees even fairly well bred. Yet the dam of Lexington, the greatest four-mile race horse of his day, was by imported Sarpedon, the sire of McConathy's Sarpedon, and the Lexington cross is found in the pedigrees of several very fast trotters. The second dam of Lexington, however, was by Sumpter, a son of Sir Archy, the most successful perpetuator of race-winning speed in America in his day.

By analyzing the pedigree of the dam of McConathy's Sarpedon, however, blood elements will be discovered that are found in the pedigrees of some of the famous long-distance race horses whose names appear in the pedigrees of several noted light-harness performers. The dam of McConathy's Sarpedon was Caroline Scott. Her sire was Sir Archy of Transport, also known as Sir Archy Montorio. Sir Archy of Transport was by Sir Archy, the best son of imported Diomed, and his dam was Transport. The latter was by Virginius, and he, too, was a son of Diomed.

The dam of Caroline Scott was Ophelia, by Wild Medley, and the same Ophelia, when mated with Woodpecker, son of Bertrand, by Sir Archy, produced the famous four-mile race horse Gray Eagle, sire of the second dams of Piedmont (2.17¼), Kentucky Wilkes (2.21½), etc. The dam of Ophelia was also by Sir Archy, and out of Lady Chesterfield, by imported Diomed.

By this it will be seen that the dam of McConathy's Sarpedon was as strongly inbred to the Diomed strain as was the dam of the famous brood mare sire Mambrino Patchen, which got Mary Mays, the dam of Ralph Wilkes. While it cannot be proven that the Sarpedon cross endowed Mary Mays with qualities which enabled her to produce a faster trotter than any other daughter of Mambrino Patchen, it is evident that she got this ability from some source, and it is probable, to say the least, that part of it came from this son of Sarpedon. Two things are certain: First, the dam of Mary Mays was by McConathy's Sarpedon. Second, Mary Mays produced a faster trotter than Red Wilkes has got from any other daughter of Mambrino Patchen; and a faster one than any other daughter of Mambrino Patchen has ever produced.

The third dam of Ralph Wilkes was by Hedge's Copperbottom. The Copperbottom cross is not a prominent factor in the pedigrees of any trotters that have made remarkably fast records. This Hedge's Copperbottom has been no more fortunate as an aid to 2.30 trotting speed than that of McConathy's Sarpedon. It would be considered as adding very little, if any, value to the pedigree of Ralph Wilkes. It is not a popular cross, yet those who have great faith in a pacing cross may be disposed to give it some credit. The third dam of Ralph Wilkes, like his second dam, was not even fairly well bred.

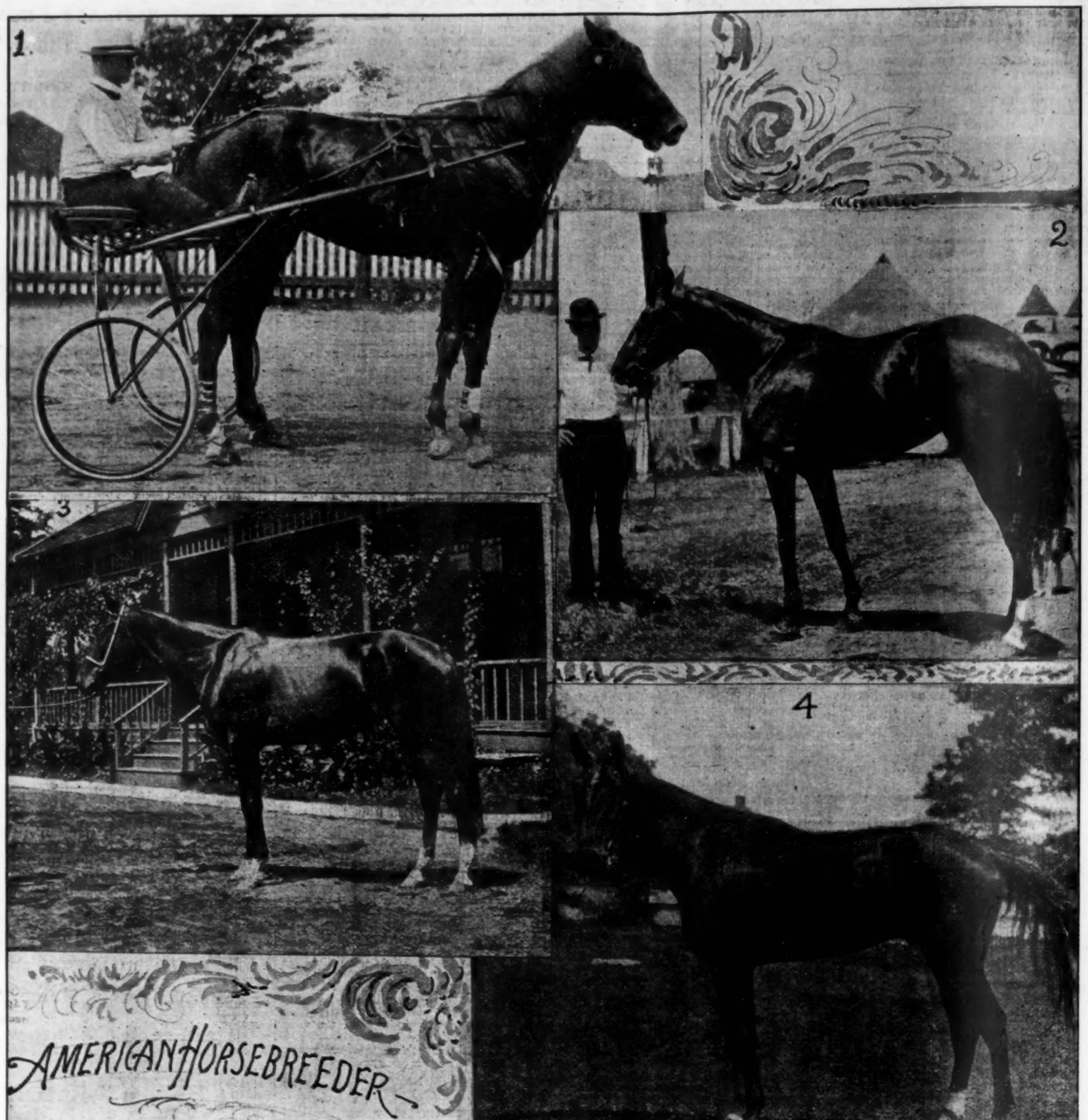
The fourth dam of Ralph Wilkes was by Woodford, a thoroughbred son of Kosciusko, by Sir Archy. Woodford never got a 2.30 performer, and it is not likely that any son of his ever sired one. Two of his daughters, however, when mated with trotting stallions produced standard speed. They were Woodbine and Sally Woodford. The former produced Wedgewood (2.19) and Woodford Mambrino (2.21¼). Sally Woodford was the dam of Brignoli (2.29¾). The Woodford cross undoubtedly contributed more to the ability of Mary Mays as a speed producer than either the Sarpedon or Copperbottom or both combined, yet it would not be considered a "gilt-edged" cross by any unprejudiced pedigree expert of good judgment.

The fifth dam of Ralph Wilkes was by Downing's Bay Messenger, a descendant of imported Messenger, that was probably inbred to the Messenger strain. His sire was Harpinus, a large bay horse which was taken from New Jersey to New Hampshire, and which left some excellent stock in the Granite State. Harpinus was by Bishop's Hambletonian, a thoroughbred son of imported Messenger, but the claim was never proven to our knowledge. Neither was it ever questioned, so far as we know, by any one who knew or pretended to know the facts.

Downing's Bay Messenger got the trotter Jim Porter (saddle record 2.28½). The dam of Clark Chief, one of the best sons of Mambrino Chief, opportunities considered, was Little Nora, by Downing's Bay Messenger, and Big Nora, a full sister of Little Nora, produced McDonald's Mambrino. This Bay Messenger cross is found remotely in the pedigrees of quite a number of fast trotters. Yet Downing's Bay Messenger could not be considered the best trotting sire of his day. He was far inferior to Andrew Jackson as a perpetuator of trotting speed, and Harris Hambletonian-foaled some seven years earlier than Downing's Bay Messenger, was much superior to him. The latter was by Bishop's Hambletonian.

Though Ralph Wilkes was a well-bred horse, yet as neither his second, third, fourth nor fifth dams were producers, nor by producing sires, his pedigree would not in all probability be considered "gilt edged" by any pedigree expert of good judgment. It is a fact, however, that Ralph Wilkes is the fastest trotter by the records yet sired by Red Wilkes, and the fastest trotter yet produced by any daughter of the renowned brood mare sire Mambrino Patchen.

It is probable, too, that had he lived Ralph Wilkes would have proven a more uniform sire of fast trotters than any other son of Red Wilkes. If we remember correctly only 33 of his foals lived to reach maturity. Eleven of these, or 33⅓ per cent. of the whole, have already taken records of 2.30 or better, three of them better than 2.20, and six of them in 2.21 or better. Several of those which have not been raced have shown well-authenticated trials in 2.30 or better, and some of them below 2.30. —American Horse Breeder.



(1)—CRESCEUS, 2.09 3-4. (2)—GRACE HASTINGS, 2 08, WORLD'S CHAMPION TROTTER TO WAGON, 2.09 1-2. (3)—MATTIE PATTERSON, 2.09 1-4. (4)—BATTLETON, 2.09 3-4.

Veterinary Department.

Questions and Answers.

Subscriber, N. H.: I have a three-year-old mare that has lately developed a slight enlargement on the front of her hock joint which some call a bog spavin. She is not lame. Kindly prescribe treatment and confer a favor.

Answer: I should strongly advise you to blister the mare's hock, as at her age you may be able to absorb the enlargement and you will certainly strengthen the joint. About two applications at intervals of three weeks between ought to be sufficient.

M. A. N., Connecticut: Kindly advise treatment for a coach horse that is getting sore forward and somewhat inclined to stumble. He does not know how to pick his feet up as he used to, and he is not at all knee sprung.

Answer: Undoubtedly your horse is developing some serious trouble, and your best plan would be to have both shoes removed, poultice his feet for a few days, then blister both feet several times at intervals of two weeks between. In this way you may control the trouble and restore him to soundness.

Subscriber, Massachusetts: My black gelding interferes with one of his hind ankles, and it is swollen. When driven the swelling goes down, but standing over night causes it to reappear. I have tried three or four remedies, but they have not cured him. Any information you may give me will be much appreciated.

Answer: I would suggest that you apply an ice poultice, which is made by crushing some ice in a small bag and binding it on to the part affected, for four nights in succession. This will relieve all fever, etc. Then try the following lotion: Powdered acetate lead, one ounce; water, one quart. Dissolve, and bathe the parts well at night. Follow this by a dry bandage. Persist in this treatment and you will relieve the trouble. If it does not you will have to blister the ankle.

O. K., L. I.: I have a mare that about six weeks ago picked up a nail in one of her hind feet, and although she stands on the foot fairly well it is still much swollen around the heel, which seems to be growing outside of the horny part of the foot. The ankle is also somewhat swollen and she seems to be weak in it. Her knees are swollen and they seem to hurt her some. Would you advise blistering the heels and ankle and also the knees, and if so how often?

Answer: After you have reduced the local fever by the use of very cold applications then apply the blister to the parts affected and repeat in two or three weeks. This will remove all soreness and guard against permanent lameness.

W. A. P., Vermont: I have a five-year old mare that was hurt in the stable last February by getting down in her stall. The accident left her with a thorough-pin about the size of a walnut both inside and out. Please advise me how to treat it, and if in your opinion it can be removed?

Answer: I have not much faith in removing thoroughpin, but to strengthen the joint and hasten absorption I would suggest that you blister the joint on both sides and repeat two or three times at intervals of two weeks between. This will cause contraction of the tissues to a certain extent and may prevent it from growing larger.

F. S., Rhode Island: I have a horse that injured both front knees, and they were swollen on the inside. I have bathed them until all fever has disappeared and then I blistered them. On one the blemish has entirely disappeared, and it is down to its natural size, but the other seems to be enlarged or callonsed around the inside. The horse has been laid up since the accident occurred, and is at present. Any advice you may offer will be thankfully received.

Answer: I think it would be well to repeat the blistering about twice, as this treatment tends to quicken absorption. By this process you stimulate a certain amount of material that you cannot get rid of any other way. After the blisters have healed you can continue the sweating and perhaps prevent a permanent enlargement.

P. S., New York: I have just purchased a very valuable horse and find that his hind ankles are cocked. The front ones are all right. I note his toes are very short. Would it help his ankles to let his toes grow? Any suggestions you may offer will be thankfully received.

Answer: By keeping the toes short you lessen the leverage. I would suggest that you have the shoes extend out quite long behind with a fairly high heel calk. Take off some of the strain. Also try the following lotion after driving: Powdered acetate lead and sulphate zinc, of each two ounces; vinegar, two quarts; water, four quarts. Mix and use freely on the ankles. Then use a dry bandage. This treatment will strengthen the parts and perhaps obviate the trouble.

Lexington (Ky.) Notes.

Although the track has been quite muddy and unfit for work during a good deal of the week, a great deal of training has been done and a very considerable number of the horses are as a consequence beginning to show high form. For the first time during the season a horse has worked in 2.12, and as will appear in the present report many very creditable miles have been made. The first animal to go in 2.12 was *Americus*, the big blazed faced bay gelding driven by Dick Curtis. He descends from the old Pocahontas stock and is a son of Rolfe N., while on the dam's side he carries the blood of Harold through one of the sons of that horse. He went the last quarter of this mile in good style, though not quite so fast as some of his previous quarters. The track was on that day quite rough, and the performances was an extremely good one.

Will Evans drove his black four-year-old pacing filly by Constantine a mile in 2.27.

T. W. Price drove a four-year-old trotter to the half in 1.06.

In one of their workouts together Dr. Robinson (now trotting) and *Dandy*, the Bosworth pacing gelding by Monte Cristo, dam by Young Jim, went the last quarter in 32 seconds. The latter is the family horse I spoke of a week or two ago.

An error crept into last week's report. Lorena Lorne, black mare, by Norris, was credited with a mile in 2.07¼. Of course this should have been 2.27¼.

Bert Herr, the five-year-old brother to Charley Herr, trotted a mile in 2.25 for David Cahill. He made the last half in 1.10.

May Day, black mare, by Abdallah Mambrino, driven by Thayer, trotted a last quarter in 31¾ seconds. She also trotted a full mile in 2.18.

Dandy, bay gelding, paced a mile in 2.25, last quarter in 33 seconds, for Richard Curtis. He afterwards went in 2.20½.

Don Oh So, brown horse (4), by Oh So, paced a mile for Scott Hudson in 2.16 1-2, last quarter in 31¾ seconds.

Laura D., brown mare, by Gen. Hancock, paced a mile for Cromie in 2.20¾, last half in 1.08.

Eagle Flannagan trotted an easy mile for Scott Hudson in 2.20, last quarter in 32½ seconds. He is working as sound and as good as he ever did in his life.

Edward S., chestnut gelding, by Binder Wilkes, paced a mile for Hudson in 2.24, last quarter in 33 seconds.

Joe Thayer drove Ilderim, bay gelding (4), by Simmons, dam by Cuyler, to the half in 1.07, making each quarter in 33½ seconds.

Silverlocks, chestnut gelding (5), by Simmons; dam, Cotilda (2.23), by Alcazar, was killed in the pasture by lightning last week. He belonged to Joe Thayer and was a promising young horse.

W. F. Freeman drove Black Beauty, black gelding, by Dark Night, a mile in 2.27, half in 1.11, last quarter in 33½ seconds.

Mike Bowerman drove Miss Frances, brown mare (5), by Cadmus J., dam, dam of Lake Erie, a mile in 2.24½, last quarter in 34½ seconds.

Joe Cromie drove Loretta, chestnut mare, by Norris, dam by Electioneer, a mile in 2.25, last quarter in 34½ seconds.

Charley Herr, bay horse (4), by Alfred G., dam, Bessie Huntington, by Happy Traveler, trotted a mile in 2.21½ for David Cahill.

Onward Silver, chestnut horse (4), by Onward, dam, Silver Maid (sister to Kentucky Union), by Aberdeen, trotted a mile in fine style for T. W. Price in 2.17½. This is the fastest mile he has worked this year.

Joe Cromie worked Lorena Lorne, black mare, by Inglewood, a mile in 2.26¾.

Joe Thayer drove The Tramp, a two year old brother to Jay Hawker (2.14¾), a mile in 2.26½, last quarter in 35½ seconds. We have yet heard of no other two year old that has been as fast a mile as this.

The Boudsman, brown colt (3), by Baron Wilkes, dam, Sorrento (dam of Jay Hawker), went a mile for the same driver in 2.24.

King Crystal, black horse, by King Nutwood, dam, Crystal (dam of Cut Glass, Crystaline, etc.), by Crittenden, went the last half of a mile in 1.10, last quarter in 33 seconds.

Mary D., bay mare, by Cheyenne, trotted a mile for Joe Cromie in 2.21½, last quarter in 35½ seconds.

Nora L., bay mare, by Jake, son of Messenger Chief, dam by a son of Bourbon Wilkes, paced several good miles, one in 2.15, last quarter in 32 seconds, and another in 2.14¾, last half in 1.05, last quarter in 32 seconds.

Miss Duke, the Simmons four-year-old mare purchased by G. W. Leavitt last spring, trotted a mile in 2.18. She had previously trotted in 2.19½. She finished the last quarter in each mile in 33¾ seconds.

Samp Wilson and Scott Hudson, driving *Annie Thornton* and *Blase Boy* together, made the mile in 2.16¼, last quarter in 32½ seconds.

Lee Darnaby drove his four-year-old mare by King Nutwood, dam by Abdallah Mambrino, in 2.29.

Don't you believe that German Peat Moss is an economical and healthy horse bedding? Ask C. B. Barrett, 45 North Market street, to send you testimonials.